JACOBS

TES IV

FINAL REPORT
RCRA FACILITY ASSESSMENT
YAKIMA AGRICULTURAL RESEARCH LABORATORY
YAKIMA, WASHINGTON



IN ASSOCIATION WITH:

TETRA TECH

METCALF & EDDY

ICAIR LIFE SYSTEMS

KELLOGG CORPORATION

GEO/RESOURCE CONSULTANTS

BATTELLE PACIFIC NORTHWEST LABORATORIES

DEVELOPMENT PLANNING AND RESEARCH ASSOCIATES





U.S. ENVIRONMENTAL PROTECTION AGENCY WASTE MANAGEMENT SUPPORT

HAZARDOUS WASTE SITES

WASTE MANAGEMENT SPANCE

CONTRACT #68-01-7351 WORK ASSIGNMENT NO. 392

FINAL REPORT RCRA FACILITY ASSESSMENT YAKIMA AGRICULTURAL RESEARCH LABORATORY YAKIMA, WASHINGTON

> TETRA TECH, INC. FOR JACOBS ENGINEERING GROUP, INC. PROJECT NUMBER: 05-B392-00 TC-3620-74-02

CONTENTS

		Page
LIST	OF FIGURES	iii
LIST	OF TABLES	iv
1.0	INTRODUCTION	1
	1.1 PRELIMINARY REVIEW	1
	1.2 VISUAL SITE INSPECTION	2
	1.3 AVAILABILITY OF DATA/DATA GAPS	2
	1.4 PROJECT CONCLUSIONS	2
	1.5 PROJECT RECOMMENDATIONS	3
2.0	DESCRIPTION OF FACILITY AND WASTES GENERATED	4
	2.1 FACILITY DESCRIPTION AND HISTORY	4
	2.2 WASTES GENERATED	7
	2.3 ENVIRONMENTAL SETTING	9
3.0	LOCATION OF RCRA-REGULATED UNITS	16
4.0	RELEASE INFORMATION FOR RCRA-REGULATED UNITS	17
	4.1 UNIT 1. SEPTIC TANK/DRAINFIELD SYSTEM	17
	4.2 UNIT 2. SOLVENT STORAGE SHED	28
5.0	REFERENCES	31
APPE	NDICES	
	APPENDIX A - HAZARDOUS WASTE MANIFESTS 1981, 1982, AND 1984 AND NOTIFICATION OF HAZARDOUS WASTE ACTIVITY 1980	
	APPENDIX B - LOCAL WATER SUPPLY WELL RECORDS FOR YAKIMA (WA) AS PROVIDED BY WASHINGTON DEPARTMENT OF ECOLOGY	
	APPENDIX C - RESULTS OF SEPTIC TANK/DRAIN FIELD SYSTEM SOIL AND WATER CHARACTERIZATION STUDY	

- APPENDIX D RESULTS OF PAH AND PESTICIDE ANALYSIS ON SOIL AND WATER COLLECTED BY WASHINGTON DEPARTMENT OF ECOLOGY
- APPENDIX E YAKIMA AGRICULTURAL RESEARCH LABORATORY VISUAL SITE INSPECTION PHOTO LOG

FIGURES

Number		Page
1	Location map of Yakima Agricultural Research Laboratory (YARL)	5
2	General zoning map of YARL vicinity	6
3	YARL site map	8
4	Location of known domestic downgradient wells	13
5	Proposed downgradient soil and groundwater sampling locations	27

TABLES

<u>Numbe</u>	<u>r</u>	Page
1	Water supply well records for Yakima, WA	14
2	Pesticides for 1986 experiments and plot maintenance	20
3	Residues analyses of DDT, TDE, and DDE in alfalfa, soil, and washings from alfalfa	21
4	Analytical results from 1983 soil sampling (ug/L)	24

1.0 INTRODUCTION

Tetra Tech, Inc. was contracted by the U.S. Environmental Protection Agency (U.S. EPA) to perform a Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) for the Yakima Agricultural Research Laboratory (YARL) in Yakima, Washington. The objectives of an RFA are to identify and gather information on releases at RCRA-regulated facilities, to evaluate a facility's solid waste management units with respect to release of hazardous materials to all media, and to determine the need for further actions and interim measures at the facility. This report combines the findings of the preliminary review (PR) phase and the visual site inspection (VSI) phase of the RFA under the RCRA corrective action program. The PR and VSI were conducted following the U.S. EPA (1986) RCRA facility guidance manual. As a result of the PR and VSI, some data gaps have been identified.

1.1 PRELIMINARY REVIEW

The PR of YARL was conducted by examining and using information in U.S. EPA Region X and Washington Department of Ecology (Ecology) files. The following documents were reviewed:

- Closure/post-closure plans
- Wastewater facility soil, sludge, and groundwater sampling reports
- Correspondence
- Facility inspection reports.

The information gathered from these sources was used to identify and characterize potential releases from the facility and to focus the activities to be conducted in subsequent phases of the RFA.

1.2 VISUAL SITE INSPECTION

The VSI for the YARL facility was conducted on 9 September 1987. The inspectors arrived at the site and met with YARL director, Mr. Robert E. Dolphin. The opening meeting focused on the facility's waste management practices. Specifically, the types of waste the facility handles and the operation of the facility's septic tank were discussed in detail. Following the opening meeting, Mr. Dolphin showed the inspectors the site. Mr. Eric Halfhill, research entomologist at YARL, joined the group during the site inspection. Photographs of waste management units were taken. A brief closing meeting was held to discuss observations made during the site inspection.

1.3 AVAILABILITY OF DATA/DATA GAPS

Groundwater quality data are not available for the facility wells because quarterly sampling has not commenced. Well logs for the two domestics wells ((b)(6) and (b) wells) located less than 1 mi south of YARL are not available. Water quality has not been monitored in any of the surrounding wells, making it difficult to assess the extent of groundwater contamination.

Soil sampling data collected in 1983 were available from YARL and Ecology. Additional soil sampling has not been conducted. More recent soil analytical data would have allowed a more comprehensive evaluation of the nature and extent of soil contamination.

Information regarding names and specific quantities of chemicals disposed of directly to the septic system does not exist.

1.4 PROJECT CONCLUSIONS

It has not been determined whether the groundwater beneath the site is contaminated. A number of factors may reduce the potential for groundwater contamination. The organochlorine pesticides routed to the drainfield are

relatively immobiles because of their low water solubility and high attraction to organic and mineral colloids in the soil. The high evapotranspiration rate and the fine textured layer of soil beneath the drainfield may retard downward migration of contaminants. In most cases, organophosphate and carbamate pesticides decompose rapidly in the soil because of chemical and microbial activity.

The groundwater monitoring wells installed at YARL in 1988 have not been sampled to date (Comstock, N., personal communication, 9 May 1988). Mearby domestic wells have not been sampled for posticides. The soil sampling plan outlined in the facility's closure plan has not been implemented to date.

The soil monitoring plan proposed by YARL will be implemented in June 1988. The plan was designed to determine the nature and extent of soil contamination beneath and adjacent to the septic tank drainfield. The plan includes provisions for collection and analysis of soil samples to define the vertical and lateral extent of soil contamination.

1.5 PROJECT RECOMMENDATIONS

Potential groundwater and soil contamination associated with the septic tank drainfield will be handled in the closure and post-closure process. The groundwater monitoring wells installed at YARL in April 1988 will be sampled and analyzed for pesticide constituents. Water table elevations will be recorded on a quarterly basis to identify groundwater flow direction and seasonal variations. If contaminants are detected in these wells, an extensive hydrogeologic assessment should be implemented. This assessment should involve installing additional downgradient wells, conducting permeability and shallow aquifer tests, and sampling surrounding shallow domestic wells.

2.0 DESCRIPTION OF FACILITY AND WASTES GENERATED

2.1 FACILITY DESCRIPTION AND HISTORY

YARL occupies approximately 9.75 ac of land located at 3706 West Nob Hill Boulevard in the City of Yakima, Washington (population 60,000) (Figure 1). The laboratory is affiliated with the U.S. Department of Agriculture (USDA), and develops insect control techniques for fruits and vegetables. Approximately 60 full- and part-time employees work at the facility. Agricultural chemical products are not manufactured on the site. Areas surrounding the site are zoned residential, local small business, and planned development (Figure 2). Three schools, two hospitals, and three shopping centers are located within 0.5 mi of the site. The Yakima Municipal Airport is approximately 1.5 mi south of the site.

Initially, the YARL site was an orchard. Pesticide research began in 1961, and until a few years ago, chemical control studies using pesticides were a major emphasis (approximately 60 percent) of the laboratory's program. A wide variety of pesticide wastes and solvents were discharged to a septic tank and drainfield disposal system at the facility from 1965 to 1985. Prior to 1965, wastes were disposed of directly on the ground (Betz, J., 8 July 1982, personal communication). Because the septic tank and drainfield system allowed pesticides to permeate the soil and because the area is characterized by highly permeable sands and gravels, there is concern that pesticides may be leaching into the shallow drinking water aquifer.

In the past several years, the research emphasis at YARL has changed. Pesticide research is now a minor component (approximately 10 percent) of the research program. Research on systems using natural and biological controls is now emphasized. As part of the research program, pesticide residues are extracted from soil and plant materials by using solvents, including hexane and benzene. Currently, most solvent waste is recycled and

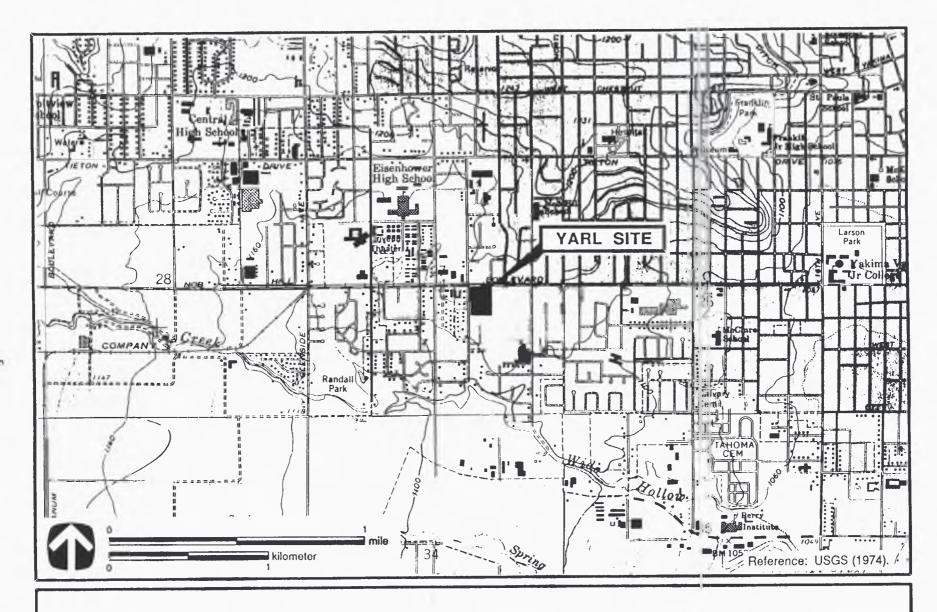


Figure 1. Location map of Yakima Agricultural Research Laboratory (YARL)



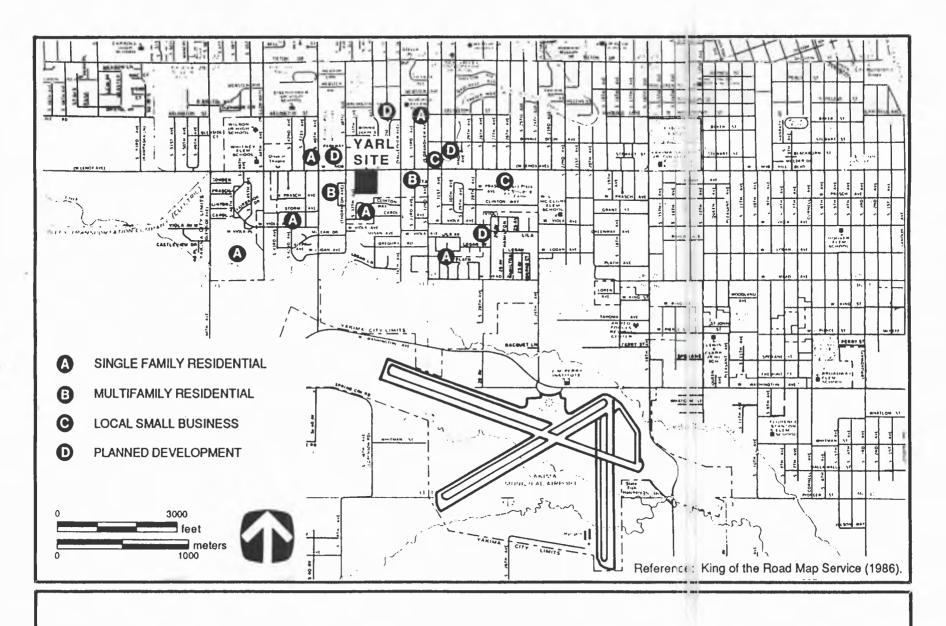


Figure 2. General zoning map of YARL vicinity.

the remaining solvent waste is transported offsite for disposal at a TSD facility. A map of the site is shown in Figure 3.

On 25 January 1985, YARL submitted a closure plan for the septic tank and drainfield system, including a monitoring component to sample and analyze soil and groundwater. Ecology reviewed and approved the plan. The groundwater monitoring system was installed in April 1988. Water quality analysis and water table elevation readings are expected to begin by the end of May 1988 (Comstock, N., 9 May 1988, personal communication). Soil sampling in the drainfield area is expected to begin in June. Core samples and drill cuttings were not analyzed during installation of the groundwater monitoring wells (Baumeister, R., 24 May 1988, personal communication).

2.2 WASTES GENERATED

Wastes generated at the YARL facility consist of a wide variety of pesticide mixtures, rinsates from the cleaning of sprayers and other equipment, and solvents. Until 1981, pesticide concentrate materials were stored onsite as part of active experimental pesticide inventories. quantity of materials stored is not known. In more recent years, unwanted pesticide concentrate materials and solvent wastes have been shipped offsite to a licensed disposal facility. In 1981, 1982, and 1984, shipments of 1,725, 884, and 1,849 lb, respectively, were sent via a licensed chemical waste hauler to the Chem-Security Systems facility near Arlington, Oregon. Manifests for these shipments are provided in Appendices A-1 (1981), A-2 (1982), and A-3 (1984). Every few years, pesticide stocks in the pesticide storage building (see Photo 3, Appendix E) are inspected and overage, unwanted, or contaminated materials are transported to Arlington. contracts a transporter to drum the pesticides prior to disposal at Arlington. The pesticide storage building is not considered a RCRA-regulated unit because it is used to store pesticide products prior to use. YARL scientists use only the amount of pesticides they need and return the remainder to storage. A sink connected to the drainfield was used to rinse pesticide residues from empty bottles and sprayers. Because all the pesticide in the bottles is used prior to rinsing, the sink is not considered

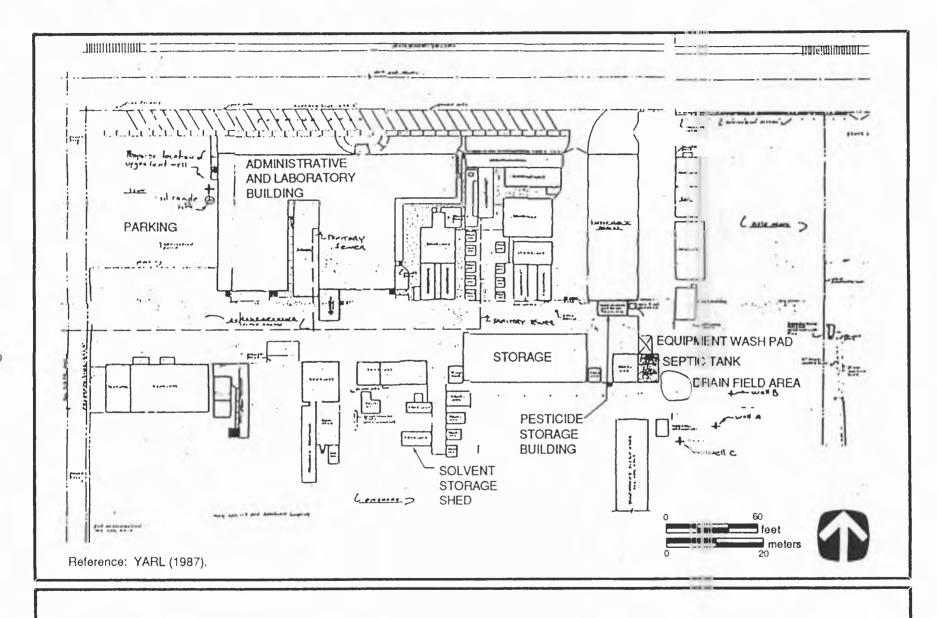


Figure 3. YARL site map.

a waste management unit (RCRA Hotline, 23 May 1988, personal communication).

Today, YARL research scientists request small quantities of pesticides, ordering only the quantity needed. They also seek arrangements to return excess product to the manufacturer. Some surplus pesticides are also given to farmers or used on research plots.

2.3 ENVIRONMENTAL SETTING

2.3.1 Climate

Yakima is located in northeastern Yakima County in south central Washington. The area lies in the rain shadow east of the Cascade Mountains and is characterized by a dry continental climate. The Yakima Valley is generally flat with average elevation above mean sea level of 1,064 ft.

Average annual precipitation in Yakima is approximately 8 in, with a mean annual lake evaporation of 42 in (USDA 1979). Three-quarters of the precipitation occurs between October and March, with December and January being the wettest months. July through September tend to be the driest months.

The mean annual temperature in Yakima is approximately 50° F (USDA 1979). Summers are sunny, warm, and dry. During the warmest summer months, afternoon temperatures in the valley range from the high 80s into the 90s and exceed 100° F at times. In winter, average maximum temperatures are in the 30s and 40s, while minimums range from the teens to the lower 20s.

Winds in Yakima County are predominantly from the west to north (USDA 1979). Strongest winds occur when major storms pass over the area, usually during the fall and winter months.

2.3.2 Geology

The geology of the YARL site consists of Columbia Plateau basalts overlain by alluvial sediments of the Ellensburg Formation. The basalt layer is 250 ft thick and has been folded into a series of large-scale folds. Alluvial gravel, sand, silt, and clay constitute the Ellensburg Formation. This layer is 1,300 ft thick with permeabilities ranging from 5×10^{-3} to 3×10^{-1} cm/sec. These sediments are in turn overlain by approximately 30 ft of recent stream alluvium of the Yakima River and its tributaries. YARL occupies gently sloping ground over a syncline between two hill-forming anticlines (Ahtanum Ridge and Yakima Ridge). The site is a slight topographic high, with adjacent land to the south gradually sloping about 3 percent toward the south [U.S. Geological Survey (USGS) 1974].

Soils at the site are derived from loess and volcanic ash. The 1937-1942 soil survey of the U.S. Soil Conservation Service (SCS 1985) characterizes the YARL site as follows: Ritzville silt loam, 1-8 percent slope, on uplands. The surface soil is pale-brown silt loam about 7 in thick, neutral to mildly alkaline, noncalcareous. The subsoil is pale-brown to light yellowish-brown silt loam or loam about 30 in thick, mildly alkaline, calcareous in the lower part. The soil is not salty or alkaline, has slight erosion hazard due to slow surface runoff, is easy to work, and has moderate inherent fertility. It has medium internal drainage, a moderate to high capacity to hold water, and an indigenous cover of sagebrush and grass. The soil is suited for supporting irrigated orchards, alfalfa production, and pasture.

2.3.3 Hydrogeology

The regional groundwater system in Yakima is generally made up of two aquifers: a shallow aquifer in the alluvial deposits of the Ellensburg Formation and the Yakima River, and a deeper aquifer located in interflow zones of the Columbia basalts. The local hydrogeology of the YARL site is not well known. Water yields in the alluvial deposits are relatively low but adequate for domestic needs (Betz, J., 8 July 1982, personal communication).

The water table is shallow (33 ft), mainly because of extensive irrigation in the area during the summer and influx from creeks draining the mountains (Baumeister, R., 24 May 1988, personal communication). Ecology measured groundwater elevations in the two residential wells ((b) (6) and (b) (6) wells) south of the site at depths of 9.1 and 19.4 ft below the surface. Information specifying which well measured 9.1 ft and which well measured 19.4 ft was not available. Water level fluctuations in the alluvium layer average about 4 ft, due to variations in stream levels, irrigation return flows, precipitation, and evapotranspiration. There is an upward movement of groundwater into the alluvium from underlying aquifers because the shallow aquifer water table is lower than the piezometric surfaces of the lower aquifers (Bechtel Environmental, Inc. 1988). This indicates that confining layers exist to generate upward gradients in the lower aquifer.

The groundwater flow is believed to be toward the south-southeast, although this direction may vary as much as 45° at any given location. This variance may be due to localized subsurface flow to two buried sloughs in the area (i.e., beneath 34th and 38th Avenues). Subsurface water in the two buried sloughs flows towards and terminates at Wide Hollow Creek. A 1985 USGS topographic map shows YARL located 1,146 ft above sea level. The nearest point on Wide Hollow Creek is located 1,100 ft above sea level. It appears that groundwater beneath YARL is generally flowing toward Wide Hollow Creek. There is not enough information to determine if groundwater discharges to Wide Hollow Creek or if the creek discharges to the groundwater. The effect of seasonal influences on groundwater flow direction is unknown.

City Water supplies drinking water to approximately three-quarters of Yakima's residents. The water is pumped from the Naches River, located 2-3 mi north of the YARL site, at a rate of 20 million gal/day. Four backup wells can provide 10 million gal/day of water to the city in the event the main water distribution system is inadequate. Two of these wells are artesian wells, located 1.5 mi southeast of the facility at the Yakima airport and 4 mi northeast of the facility at Kiwanis Park. A "rainy" well

is located 2 mi northwest of the facility near the Naches River. This well collects water through natural infiltration. A deep well, located 4 mi northeast of the facility, provides less than 1 million gal/day (Young, M., 9 May 1988, personal communication).

The Nob Hill Water Association is a private organization that supplies water from deep (500-1,800 ft) wells to approximately one-quarter of Yakima's residents in the western part of the city. These wells are located 2.5-4.5 mi northwest of the facility, at 6111 Tieton Dr., Crest Dr., Biuenilis Pl., 8500 Scenic Dr., and 68th and King St. (Shepard, P., 12 December 1987, personal communication).

Water well reports for wells within several miles of the YARL site are included in Appendix B. According to these reports, 12 wells are completed in the shallow aquifer and more than half of those shallow wells are located hydrologically downgradient of the YARL site, in the presumed direction of groundwater flow. At least three shallow domestic wells are less than 1 mi from the site (Figure 4). Water supply wells and their locations are listed in Table 1. However, water well reports were not available from Ecology for the (b) (6) and (b) (6) wells (Bowhay, D., 5 May 1988, personal communication). Groundwater is also used for irrigation purposes in Yakima.

2.3.4 Surface Water

The closest surface water body to the YARL site is the Naches River and Cowiche Ditch, which is located about 500 ft northeast of the site. On a 1985 USGS map, a drainage ditch is located 0.4 mi northeast of the site. There are no other surface drainage ditches within 1 mi of the YARL site on the USGS map. However, Wide Hollow Creek, a perennial creek, is located approximately 0.5 mi south, topographically downgradient of the site, and flows east-southeast to the Yakima River. Wide Hollow Creek is used for bank fishing and domestic irrigation. The Yakima River is located approximately 4 mi east of the site, and the Naches River about 2.5 mi north of the site.

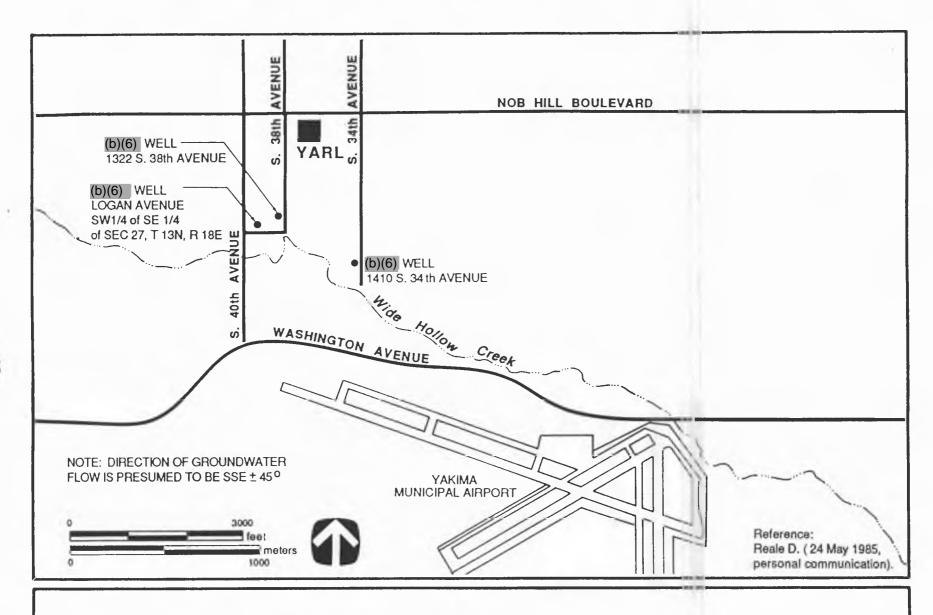


Figure 4. Location of known domestic downgradient wells.

TABLE 1. WATER SUPPLY WELL RECORDS FOR YAKIMA, WA

		cation					Depth	
Owner	Street		Ge	eogi	raphio		(ft)	Aquifer
b)(6)		NW SW	Sec	34	T13N	R16E	350	Deep
		SW SW	Sec	34	T13N	R18E	106	Deep
		NW SW	Sec	34	T13N	R18E	95	Deep
		NW SW	Sec	34	T13N	R18E	49	Shallow
		NW SW	Sec	34	T13N	R18E	60	Shallow
		NW SW	Sec	34	T13N	R18E	90	Deep
		NW SW	Sec	34	T13N	R18E	20	Shallow
		NE SW	Sec	34	T13N	R18E	21	Shallow
		NE SW	Sec	34	T13N	R18E	20	Shallow
		NE SW	Sec	34	T13N	R18E	20	Shallov
		NE SW	Sec	34	T13N	R18E	118 -	Deep
		NW SE	Sec	34	T13N	R18E	751	Deep
		SW NE	Sec	34	T13S	R18E	92	Deep
		SE NW	Sec	34	T13N	R18E	75	Shallow
		SW NW	Sec	34	T13N	R18E	30	Shallow
Packaging Systems,								
Inc.		NW NE	Sec	34	T13N	R18E	117	Deep
Calvary Cemetery	1405 S. 24th Ave.	SW SE	Sec	26	T13N	R18E	132	Deep
Calvary Cemetery	1405 S. 24th Ave.	SW SE	Sec	26	T13N	R18E	190	Deep
(b)(6)		SW SW	Sec	26	T13N	R18E	57	Shallov
		NE SW	Sec	27	T13N	R18E	65	Shallow
		NW SW	Sec	27	T13N	R18E	140	Deep
City of Yakima	129 N. 2nd St.	SW SW	Sec	27	T13N	R18E	332	Deep
(b)(6)		SW SE	Sec	27	T13N	R18E	58	Shallow

High stages on the local rivers occur with the melting of the winter snowpack, generally during May and June. Peak flows and flash flooding have occurred along the smaller streams with local heavy rainfall in late fall, early winter, and sometimes spring.

3.0 LOCATION OF RCRA-REGULATED UNITS

The RCRA-regulated units at YARL include the septic tank/drainfield system (Unit 1) and the solvent storage shed (Unit 2). Locations of these units are shown in Figure 3. Descriptions are provided in the following section of this report.

4.0 RELEASE INFORMATION FOR RCRA-REGULATED UNITS

A discussion of each RCRA-regulated unit is provided in this section based on information obtained from the VSI and PR. Groundwater concerns for all RCRA-regulated units in Section 4 of this report will be addressed under the closure and post-closure process.

4.1 UNIT 1. SEPTIC TANK/DRAINFIELD SYSTEM

4.1.1 Description

The septic tank/drainfield system (see Figure 3) was initially designed as a sanitary sewer system. The system was installed in 1961, probably by laboratory personnel (YARL 1987), using the standard plumbing methods of the time. A restroom in a nearby shop and storage building was constructed concurrently with the septic system. The washbasin and toilet of the restroom are linked to the septic tank by drain pipes. Connections were added to modify the system for pesticide disposal. There are no records on file specifying construction of the system.

The septic tank/drainfield system consists of a 300-gal concrete tank connected to a 4-in diameter, 30-ft-long concrete drain tile, installed approximately 2 ft below the ground and covered with topsoil. Overflow effluent from the tank is discharged through the drain tile, which is surrounded by a bed of stream gravel. An inactive buried irrigation line also runs east and west just south of the drainfield tile. This line once provided water for field irrigation from the Naches and Cowiche Ditch. Because the irrigation line apparently leaked, it was plugged in 1985 and replaced with a PVC pipe sprinkler system (Halfhill, J., 8 January 1988, personal communication).

Pesticides in dilute form were first introduced into the septic tank/drainfield system in approximately 1965, when the pesticide storage

building was constructed. The sink installed in this building was connected to the septic tank. Rinse water containing pesticides washed from hand sprayers, glassware, and containers would flow to the septic tank from this sink. In approximately 1974, a 165-ft² concrete pad surrounded by a surface drain was constructed. The surface drain was connected to the septic tank with a 4-in diameter concrete pipe. Field sprayers were drained of excess spray mixtures at the drain. Sprayers, tractors, and other equipment and vehicles were cleaned with a water hose at this site. Surface water runoff from the concrete pad entered the outdoor drain via the 4-in pipeline. The concrete pad is considered part of the septic tank/drainfield system and is not classified as a separate unit (RCRA Hotline, 23 May 1988, personal communication).

The sink in the pesticide storage building was disconnected from the septic tank in June 1984, following a decision by Agricultural Research Service management personnel to close the septic tank/drainfield system. Wastewater and rinsate delivered through the sink drain were collected in portable containers during the 1984 growing season and disposed of by application to overgrown field plots. Workers were instructed not to introduce any more insecticides into the septic tank/drainfield system. The ground drain was sealed with concrete in June 1985 when it became known that equipment washed at the outside drain was contaminated with pesticides. The restroom and washbasin in the shop and storage building remain functional and connected to the septic tank. Although the restroom and washbasin are used infrequently, wastewater is apparently discharged through the drains to the drainfield.

Prior to disconnecting the sink in the pesticide storage building and sealing the ground drain, the facility discharged to the septic tank/drain-field system an estimated 250 gal/yr of various pesticide solutions (5,000 gal over a 20-yr period), containing approximately 100 lb of pesticides, and approximately 5,000 gal/yr of rinsate from the application equipment (YARL 1987).

4.1.2 Waste Characteristics

Research at the laboratory involves the use of registered and experimental pesticides provided by chemical companies. Ecology (1987) estimated that several hundred compounds were disposed of during the 20 yr that the septic tank/drainfield system was in operation. Complete records indicating names and quantities of chemicals disposed of through the septic system do not exist. YARL apparently used a great variety of pesticides in small quantities. Diluted pesticides known to have been introduced into the system with wastewater include but are not limited to Guthion, Sevin, Malathion, Parathion, Tetraethylpyrophosphate (TEPP), DDT, Temik, Methoxychlor, Kelthane, Lindane, Captan, Cyprez, and Benelate (Ecology 1987). Apparently heavy metals, including lead arsenate, and pesticide concentrates were never discharged into the septic tank/drainfield system. The diversity of pesticides used onsite is represented by Table 2, listing names and quantities of pesticides used during the 1986 growing season (Pankanin, J., 20 February 1987, personal communication).

DDT, a persistent chlorinated hydrocarbon, was used by the previous owner, when the site was a pear orchard. DDT was last used in 1967, when a small amount was applied on a plot to determine the depth of migration into the soil. DDT was never discharged to the drainfield. In 1968, USDA discovered that alfalfa grown on YARL land was contaminated with residues of DDT metabolites at levels higher than 100 ug/kg. Chemists at YARL found DDT metabolites at concentrations in excess of 10,000 ug/kg in the upper 12 in of soil from the alfalfa plots (Butler et al. 1970). Results of these DDT residue analyses are shown in Table 3. Recent sampling has shown small amounts of detectable residues of DDT-pp' in the soil (Halfhill 1983).

A brief discussion of the physical and chemical properties of the pesticides used at YARL is provided below.

Organochlorine pesticides have long residence times and low mobility in the soil and exhibit resistance to microbial and chemical degradation. These compounds may persist in the soil for more than 30 yr. The following pesticides are classified as organochlorine:

TABLE 2. PESTICIDES FOR 1986 EXPERIMENTS AND PLOT MAINTENANCE

Advantage (I)a	1	l-2 gal	Noxfire (I)	1 q
Alar (Plant GR) ^b		1 lb	Omite CR (I)	3 11
Ammo (I)		1 1b	Orthene (I)	1 11
Bayleton 50W (F)C		4 1b	Orthene (I)	1 11
Baysir 25W (I)		1 lb	PBU-26 PB-Nox (I)	
Bay bue 1452 (I)		1 lb	PBU-26 piperonyl	
Baytex 4 (I)		1 gal	Parathion (I)	4 11
Butamin P&O (I)	1 cup	(4 oz)	Pentac (I)	1 11
Bay FCR 1272 (I)		1 pt	Pirimor 50W (I)	1.5 11
Captan 25 percent	SP (F)	11 lb	Pounce (I)	1 q
Casoron (H)		20 lb	Princep 4L (H) ^d	1 ga
Chlorban granules	(I)	1 1b	Pydrin 2.4 EC (I)	
Cymbush (I)		1 qt	Pyrenone (I)	1 cup (4 oz
Cyprex 65W (F)		- 3 1b	Round-up (H)	1.75 ga
Diazinon (I)		4 1b	SBP 1382 (I)	1 p
Dibrom 8EC (I)		2 gal	Sectrol (I)	24 o
Dimilin 25W (GR)		10 lb	Spur (I)	1 q
Disyston (I)		1 gal	Supracide (I)	2 ga
Dursban (I)		3 1b	Supreme oil (I)	50 ga
Furadan 15G (I)		5 1b	Surflan (H)	1 p
Insectatapes (I)	12 (cartons	Tempo 2C	16 o:
MK-936 (I)		1 L	TH 6043 25W (GR)	8 0
Monitor 4EC (I)		1 pt	TH 6044 25W (GR)	8 0
Morestan (I)		2 1b	TH 6045 25W (GR)	8 0
Nicotine sulphate		2 pt	Zolone (I)	1 ga
Nudrin (I)		1 qt		

Reference: Pankanin, J., 20 February 1987, personal communication.

a (I) = Insecticide.

b (F) = Fungicide.

C (GR)= Granular insecticide.

d (H) = Herbicide.

TABLE 3. RESIDUE ANALYSES OF DDT, TDE, AND DDE IN ALFALFA, SOIL, AND WASHINGS FROM ALFALFA

			Parts per billion ^a					
Test Number		DDE	Op'-DDTb	TDEb	Pp'-DDT	Total		
.4	In Alf	alfa						
September 1967 Test 1		29 0 22.U	21.0 20.0		129.0 106.0	189.0 151.0		
Average		32.0	20.5		117.5	170.0		
May 1968		9.0	13.0	ND	23.0	45.0		
June 1968 Test 1 Test 2 Test 3		21.0 21.0 22.0	30.0 33.0 30.0	ND ND ND	52.0 69.0 63.0	103.0 123.0 115.0		
Average		21.3	31.0		61.3	113.6		
Washing experiment In Wash	hed Alfal	fa and Was	shes ^C					
Test 1: alfalfa washed with chlorofo	orm	17.0	30.0	ND	54.0	101.0		
Test 2: chloroform wash		3.0 2.0	4.0	ND ND	13.0 10.0	20.0 15.0		
Average		2.5	3.5		11.5	17.5		
Test 3: alfalfa washed with water		17.0	36.0	ND	62.0	115.0		
Test 4: water wash		ND ND	ND 3.0	ND ND	3.0 4.0	3.0 7.0		
Average		ND	1.5		3.5	5.0		
In	Soil (Ma	y 31, 1968	3)					
Test 1		2,540	890	ND	4,980	8,410		
Test 2	a. b.	1,900 2,160	1,310 710	ND ND	5,510 3,030	8,720 5,900		
Average		2,030	1,010	ND	4,270	7,310		
Test 3	a. b	2,540 1,850	1,790 1,370	ND ND	7,510 5,510	11,840 8,730		
Average		2,195	1,580	ND	6,510	10,285		
Average for all tests		2,198	1,214	ND	5,308	8,720		

^aThe residues in alfalfa were corrected for the recovery obtained that year. The residues in soil were not corrected. ND = not detected.

Reference: Butler et al. (1970).

 $^{^{\}mathrm{b}}$ The column used did not separate op'-DDT and TDE sufficiently to measure them separately. The later columns did, and TDE was not detected.

 $^{^{\}text{C}}$ Only one sample of alfalfa from each washing was analyzed for residues.

- DDT
- Lindane
- Methoxychlor
- Captan.

Organophosphate and carbamate pesticides have a short residence time and degrade rapidly. Organophosphates are not persistent, with residence times ranging from 2 wk to several months. Carbamates are slightly to moderately persistent with residence times ranging from 1 to 3 mo. Both organophosphates and carbamates are susceptible to chemical and microbial decomposition and are not transported in the groundwater in measurable quantities. The following pesticides are classified as organophosphates and carbamates:

- Guthion
- Malathion
- Methoxychlor
- Parathion
- TEPP.

The low mobility, low water solubility, and resistance to degradation of organochlorine compounds suggest that they are likely to be contained in the soil beneath the drainfield. Organochlorine compounds have a strong tendency to attach to soil organic and mineral colloids. In comparison, organophosphate and carbamate compounds are dispersed rapidly from the soil due to the susceptibility of these compounds to chemical and microbial decomposition. These compounds are not likely to be detected in the soil at the YARL facility.

4.1.3 Migration Pathways, Evidences of Release, and Exposure Potential

Groundwater is a pathway of concern for contaminant migration. Contaminants released to the subsurface drainfield system may have infiltrated permeable sediments to shallow groundwater. There is potentially a preferred migration route for groundwater (i.e., the north-south sloughs buried under 34th and 38th Avenues). The high potential for evapotranspiration and fine textured layer of soil beneath the drainfield will retard downward groundwater migration.

One water sample was collected from the septic tank during a March 1983 study by the USDA. A control sample was collected along with the water sample. Samples were analyzed for several organophosphate and chlorinated hydrocarbon pesticides by research staff at YARL. The water sample from the septic tank contained no detectable residues (<0.05 mg/kg) of any of the pesticides analyzed (Halfhill 1983). Results of these analyses are presented in Appendix C.

During the USDA 1983 study, Ecology also collected one water sample from the septic tank and sent it to the U.S. EPA Region X laboratory for analysis. Concentrations of Aldrin, Dieldrin, DDT, Endosulfan, and Endrin found in the septic tank exceeded water quality criteria for drinking water consumption (see Table 4 for comparison). Results of these analyses are presented in Appendix D.

Surface water is a potential pathway of concern for contaminant migration. Wide Hollow Creek is located approximately 0.5 mi south of YARL. It is the nearest surface water downgradient from the site in the presumed direction of groundwater flow. Contaminated groundwater flowing toward the south-southeast may release contaminants to Wide Hollow Creek. Wide Hollow Creek flows east-southeast to eventually join the Yakima River. Surface runoff is minimal because the soils are permeable and the gradient is relatively gentle (3 percent).

TABLE 4. ANALYTICAL RESULTS FROM 1983 SOIL SAMPLING (ug/L)

Pestic	Water Quality Criteria for Protection of cide Human Health	Measured Value
Aldrin	n 0	12
Endrin	1	35
Dieldr	rin 0	11
DDT	0	1.020
Endosu	iltan /4	280

Reference: U.S. EPA (1987).

Soil is a pathway of concern for contaminant migration. Two soil samples were collected from areas near the septic tank/drainfield system (at depths of 2 ft and 5 ft) on 3 March 1983 by the USDA. Two control samples were also collected, for a total of four samples. The exact locations of these samples was not documented. The samples were analyzed for several organophosphate and chlorinated hydrocarbon pesticides by research staff at YARL. The drainfield soil sample from a 2-ft depth indicated low concentrations of pesticide residues. This soil sample contained organochlorine pesticide residues of 0.05 mg/kg Lindane and 0.10 mg/kg DDT-pp: (Halfhill 1983). The subsurface soil samples from a 5 ft depth near the drainfield contained no detectable residues (<0.05 mg/kg) of any of the pesticides analyzed (Halfhill 1983). Results of these analyses are presented in Appendix C.

During the USDA 1983 study, Ecology also collected three subsurface soil samples (at depths of 2 ft, 5 ft and 5.5 ft) from the drainfield area. The exact locations of these samples were not documented. These samples were sent to the U.S. EPA Region X laboratory for analysis. Analytical results indicated that the concentration of DDT was 3 mg/kg in one soil sample collected near the drainfield. Results of these analyses are presented in Appendix D.

Air is not a pathway of concern for contaminant migration because contaminants were introduced to the soil 2 ft below the ground surface and will not migrate upwards. Pesticides disposed of in this area are not likely to migrate to the air because of their low volatility. The potential for contaminant migration through the air is extremely low.

Subsurface gas is not a pathway of concern for contaminant migration because the contaminants were introduced in dilute form and not capable of developing subsurface gas in explosive or toxic concentrations.

The potential for human exposure to contaminants associated with the septic tank/drainfield is considered low for all pathways except groundwater. Several residences south of the YARL site obtain drinking water from domestic wells. Because some of these domestic wells are presumed to be

downgradient of the YARL site, there is potential for exposure to of contaminants. The Yakima County Environmental Health Department does not have a file on YARL. There is no record of bacterial contamination of shallow groundwater in the vicinity of YARL (Bohway, D., 5 May 1988, personal communication). A properly functioning septic tank has bacterial-organic mats which chemically absorb pesticide molecules and tend to inhibit rapid movement of pesticides from the drainfield.

Wide Hollow Creek is located approximately 0.5 mi south of the site in the presumed direction of groundwater flow. Because Wide Hollow Creek is used for bank fishing and domestic irrigation, contaminated groundwater discharged into this creek may also affect aquatic biota, irrigated crops, and humans who use these resources.

4.1.4 Conclusions and Recommendations

It is unknown whether groundwater beneath the site is contaminated. The facility's groundwater monitoring wells have not been sampled to date. Nearby domestic wells have not been sampled for pesticides (Anderson, K., 28 July 1987, personal communication). YARL's (1987) soil sampling plan has not been implemented to date. Proposed soil and groundwater sampling locations are shown in Figure 5. The upgradient monitoring well is not shown because its location has not been established.

YARL has not yet characterized the hydrogeology of the site. Ground-water concerns will be handled under the closure and post-closure process. YARLs closure plan outlines monthly groundwater monitoring for water quality, water table elevation, groundwater gradients and flow direction, seasonal fluctuations, and effects of irrigation. A surface and subsurface soil sampling to characterize the nature and extent of soil contamination is also proposed in the closure plan.

If the results from YARL's soil and groundwater investigation indicate contamination, an extensive hydrogeologic assessment should be implemented including installation of additional groundwater monitoring wells, sampling

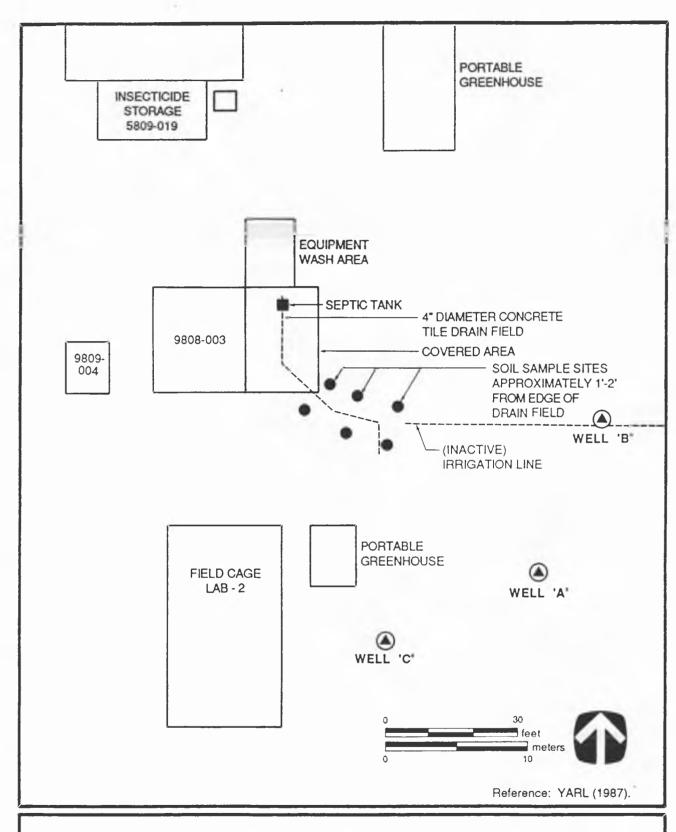


Figure 5. Proposed downgradient soil and groundwater sampling locations.

of downgradient domestic wells, and conduct permeability and shallow aquifer tests.

4.2 UNIT 2. SOLVENT STORAGE SHED

4.2.1 Description

The solvent storage shed, approximately 6 ft x 10 ft with a concrete foundation, is used for storage of both virgin and waste organic solvents (see Figure 3) (Photo 4 of Appendix E). Prior to "a couple of years ago," solvent wastes were sent to the county landfill (Dolphin, R., 9 September 1987, personal communication). Solvent waste is now shipped offsite to a licensed hazardous waste disposal facility (Chem-Security Systems in Arlington, Oregon). YARL generates about 25 gal/yr of solvent waste (Dolphin, R., 9 September 1987, personal communication). During the VSI, there were nine 5-gal drums of solvent waste in the storage shed (see Photo 4 of Appendix E). These wastes have accumulated since the last shipment was made to Chem-Security Systems, approximately 2 yr ago.

4.2.2 Wastes Characteristics

The chemists at YARL test for pesticide residues by using a number of solvents, including hexane and benzene. Wastes generated are actually a mixture of solvents, pesticides, and still bottoms. Solvents used in the chemistry laboratory are redistilled in a laboratory-scale distillation unit. Still bottoms from the distillation process and spent solvent and pesticide mixtures are collected in 5-gal drums. When the 5-gal drum is full, it is sealed and transferred to the solvent storage building. Known components of this solvent mixture, excluding the pesticide component, are described below.

Benzene is an organic solvent. It is a U.S. EPA listed hazardous waste (F005), a priority pollutant, and known carcinogen.

- Hexane is not listed as a hazardous waste. However, it does have ignitable characteristics (D001).
- Still bottoms are generated from the recovery of spent organic solvents such as benzene. They are a U.S. EPA listed hazardous waste (F005).

4.2.3 Migration Pathways, Evidences of Releases, and Exposure Potential

The potential for contaminant migration from the solvent storage shed to groundwater is low. The shed has a concrete floor, and solvent wastes stored in the shed are sealed in 5-gal drums prior to transfer from the chemistry laboratory.

There is virtually no potential for direct release of wastes in the storage shed to nearby surface water. The surface water nearest to the solvent storage shed are the Naches River and Cowiche Ditch, located approximately 500 ft to the northeast.

There is a potential for the release of solvent waste to soil outside the storage shed if waste drums were spilled in transport to the storage shed. Because drums are sealed prior to transport, the potential for release to soil is low.

Air is not a pathway of concern for contaminant migration. Although many solvents are volatile, the potential for releases to the air is low because drums are sealed and stored in the solvent storage shed.

Subsurface gas is not a pathway of concern for contaminant migration. The potential for subsurface gas development is low because solvent waste are sealed within 5-gal drums and contained in a storage shed with a concrete floor.

The exposure potential to the environment from waste drums stored in the solvent storage shed is low, because of the shed construction design and the drum sealing practices that are used. The shed has a concrete foundation and is enclosed by a berm.

4.2.4 Conclusions and Recommendations

No further action is required under the RFA/RCRA Facility Investigation process for the solvent storage shed. Mixed solvent, pesticide, and still bottom wastes stored in the solvent storage shed have a low potential for release to the environment. The exposure potential is low because of the drum sealing practices, the construction design of the shed, and the relatively small quantities of waste in storage. No spills were observed during the VSI.

5.0 REFERENCES

Anderson, K. 28 July 1987. Personal Communication (phone by Mr. Brian O'Neal, Tetra Tech, Inc.). Washington Department of Ecology, Environmental Quality Division, Yakima, WA.

Baumeister, R., 24 May 1988. Personal Communication (phone by Ms. Denise M. Jewett, Tetra Tech, Inc.). U.S. Department of Agriculture, Yakima, WA.

Bechtel Environmental, Inc. March 1988 Phase I remedial investigation report for a tormer pesticide formulation plant. Bechtel Environmental, Inc., Seattle, WA.

Betz, J. 8 July 1982. Personal Communication (internal memorandum to Mr. John Osborn, Ecology and Environment, Inc.) Ecology and Environment, Inc., Seattle, WA.

Bowhay, D. 5 May 1988. Personal Communication (phone by Ms. Denise M. Jewett, Tetra Tech, Inc.). Yakima Agricultural Research Laboratory, Yakima, WA.

Butler, L.I., B.J. Landis, and M.M. McDonough. 1970. Residues of DDT and metabolites in the soil and in alfalfa grown on former orchard land. Washington State University, College of Agriculture, Washington Agricultural Experiment Station, Pullman, WA. 5 pp.

Comstock, N. 9 May 1988. Personal Communication (phone by Ms. Denise M. Jewett, Tetra Tech, Inc.). Yakima Agricultural Research Laboratory, Yakima, WA.

Dolphin, R. 9 September 1987. Personal Communication (meeting with Ms. Susan C. Walker, Tetra Tech, Inc.). Director, Yakima Agricultural Research Laboratory, Yakima, WA.

Halfhill, J.E. 1983. Report of residue analysis, Yakima Agricultural Research Laboratory. Yakima Agricultural Research Laboratory, Yakima, WA. 30 pp.

Halfhill, J.E. 9 September 1987. Personal Communication (meeting with Ms. Susan C. Walker, Tetra Tech, Inc.). Yakima Agricultural Research Laboratory, Yakima, WA.

Halfhill, J.E. 8 January 1988. Personal Communication (phone by Ms. Susan C. Walker, Tetra Tech, Inc.). Yakima Agricultural Research Laboratory, Yakima, WA.

Huntamer, D. 19 April 1983. Personal Communication (letter to Merley McCall, Washington Department of Ecology). Washington Department of Ecology, Yakima, WA.

King of the Road Map Service. 1986. Map of Yakima, Selah, Union Gap. King of the Road Map Service, Inc., Seattle, WA.

Pankanin, J. 20 February 1987. Personal Communication (letter to Mr. C. Rice, Chief, RCRA Compliance Section, U.S. Environmental Protection Agency, Seattle, WA). U.S. EPA, Seattle, WA.

RCRA Hotline. 23 May 1988. Personal Communication (phone by Ms. Denise M. Jewett, Tetra Tech, Inc.). U.S. Environmental Protection Agency, Washington, DC.

Shepard, P. 12 December 1987. Personal Communication (phone by Ms. Susan C. Walker, Tetra Tech, Inc.). Nob Hill Water Association, Yakima, WA.

Sitting, M. 1985. Handbook of toxic and hazardous chemicals, and carcinogens. Second Edition. Noyes Publications, Park Ridge, NJ.

U.S. Department of Agriculture. 1979. Washington climate for Grant, Kittitas, Klickitat, and Yakima Counties. Washington State University, College of Agriculture, Pullman, WA.

U.S. Environmental Protection Agency. 1986. RCRA facility assessment guidance. U.S. EPA, Washington, DC.

U.S. Environmental Protection Agency. 1987. RCRA Facility Investigation (RFI) guidance Vol. I of IV. Development of an RFI work plan and general considerations for RCRA facility investigations. Draft. EPA 350/SW-87-001. U.S. EPA, Waste Management Division, Office of Solid Waste.

U.S. Geological Survey. 1974. Yakima West, WA: national topography map series, Scale 1:24,000. USGS, Reston, VA.

U.S. Soil Conservation Service. 1985. Soil survey of Yakima County area, Washington. U.S. Department of Agriculture, National Cooperative Soil Survey. 345 pp + 87 maps.

Washington Department of Ecology. 1987. Public notice and fact sheets regarding closure plan for Yakima Agricultural Research Laboratory, Yakima, WA. 222 chw and 224 chw. Washington Department of Ecology, Olympia, WA. 4 pp.

Wick, T. 12 December 1987. Personal Communication (phone by Ms. Susan C. Walker, Tetra Tech, Inc.). City Water, Yakima, WA.

Yakima Agricultural Research Laboratory. 1987. Plan amendment and revision of the closure plan for pesticide disposal drainfield at the USDA's Yakima Agricultural Research Laboratory, March 6, 1987. YARL, Yakima, WA. 20 pp. + attachments.

Yakima County Health Department. 5 May 1988. Personal Communication (telephone conversation with Ms. Denise Jewett, Tetra Tech, Inc.). Yakima County Environmental Health Department, Yakima, WA.

Young, M. 9 May 1988. Personal communication (phone by Ms. Denise Jewett, Tetra Tech, Inc.). City of Yakima Water Department, Yakima, WA.

APPENDIX A

HAZARDOUS WASTE MANIFESTS 1981, 1982, AND 1984 AND NOTIFICATION OF HAZARDOUS WASTE ACTIVITY 1980

APPENDIX A-1

HAZARDOUS WASTE MANIFESTS FOR 1981

YAKIMA AGRICULTURAL RESEARCH LABORATORY

ear out here

ENVIRONMENTAL PROTECTION AGENCY

GENERATOR ANNUAL HAZARDOUS WASTE REPORT

This report is for the calendar year ending December 31, 1981.

The fitter of the second of th
WAD120513957 10 G
YAKIMA AGRIC RES LAB USDA SEA AR ATTN: HALFHILL, ERIC RES ENTOM 3706 W NOB HILL BLVD YAKIMA WA 98902
I. GENERATOR'S EPA I.D. NUMBER
1 2 13 14 15
The state of the s
II. NAME OF INSTALLATION
30 69
and the first of the property of the state o
III. INSTALLATION MAILING ADDRESS
15 16
Street or P.O. Box
15 16 41 42 47 51
City or Town State Zip Code
IV. LOCATION OF INSTALLATION (if different than section III above)
15 16 Street or Route number
15 16 41 42 47 51 State Zip Code
V. INSTALLATION CONTACT
H A L F H L L J . E R I C
Name (last and first)
15 0 9 1 - 1 5 1 7 5 1 - 1 5 1 8 1 7 1 7 1 46 55
5 0 9 - 5 7 5 - 5 8 7 7 46 55
Phone No. (area code & no.)

J. Fric Halfhill. Research Entomologist.

Print/Type Name

Generator Annual Hazardous Waste Report (cont.)

This report is for the calendar year ending December 31 1981

VII. GENERATOR'S EPA I.D. NO.

WIAIDI 1 2 0 5 1 3 9 5 7 2

VIII. FACILITY NAME ispecify facility to which all wastes of

Marie Committee of the Committee of the

CHEM-SECURITY SYSTEMS, INC.

IX. FACILITY'S EPA I.D. NO.

Star Route

Arlington, OR 97812

D R D 0 8 19 14 15 1 2 1 3 1 5 3

XI. TRANSPORIATION SERVICES USED due to the name and EPA identification number of all tr thuring 1981. This section to be completed only once. Do not repeat on supplemental sheets.) Generator transported all wastes

Yakima Agric. Res. Lab. USDA SEA AR/WAD120513957

XII. W	/AST	E IDENTIFICATION		C. EPA Hazardous		it of ure
	Line	A. Description of Waste	8. DOT Hazard	Waste No. (see instructions)	D. Amount of Waste	E. Unit of Measure
	1	Aldicarb	118	35 38 39 42		P
	2	Aldoxycarb	18	1 1 P 10 16 19	1 1 1 1 3 0	P
	3	Azinphosmethyl	18	111111	2.38	P
	4	BAY FCR 1272	1, 8		.50	P
4	5	BAY HOX 3298	18	111 111	1,.09	P
	6	Benomyl	18	111111	7,5	P
	7	Bufencarb	18	111 111	5, 00	P
	8	Captan	1,5	111 111	5,. 7,4	P
	9	Carbaryl	13		4, 8, 5,5	P
	10	Carbofuran	18	111 111	1 1 1 1 1 1 0 . 5 3	P
	11	Carbophenothion	18		1 1 1 1 11 0 50	P
	12	CGA	18		1 1 1 1 1 8 38	P

XIII. COMMENTS (enter information by section number—see instructions)

Generator Annual Hazardous Waste Report (cont.)

This report is for the calendar year ending December 31, 1981.

VII. GENERATOR'S EPA I.D. NO.

W|A|D|1|2|0|5|1|3|9|5|7|-33

IX. FACILITY'S EPA I.D. NO.

O[R]D[0]8]9]4]5]2]3 5 3

VIII. FACILITY NAME (specify facility to which all wastes or this page were shipped)

CHEM-SECURITY SYSTEMS, INC.

X. FACILITY ADDRESS

Star Route Arlington, OR 97812

XI, TRANSPORTATION SERVICES USED (to the name and EPA relimination numbers of all transporters whose services were used during 1981. This section to be completed only once. Do not repeat on supplemental sheets.)

Line	A. Description of Waste	B. DOT Hazard	Wast (see inst	fazardous e No. tructions)	D. Amount of Waste	E. Unit of
1	Chlordimeform	18	35 38	39 42 47 50	5,00	P 60
2	Chloropropylate	18	1 1 1		2.38	P
3	Chlorpyriphos	_ 13		1 1 1	1, 1, 1, 7,2	P
4	Cybexyltin	18	111	111	1 1 1 1 1 1 1 50	P
5	DDT	18	1061	111	50	P
6	Diazinon	1,3	111	111	1, 3, 49	Р
7	Dieldrin	1,3	PØ 3 7	1 1 1	1 1 1 1 1 1 4 1 1 1 8	P
8	Diflubenzuron	1,3	111	111	.25	P
9	Dipel		111	111	2.45	P
10	Disulfoton	18	P 10 13 19		111116.42	P
11	DS 15647	16	111	111	1 1 1 1 1 1 .48	P
12	DS 24465	18	111	1.1.1	.68	P

XIII. COMMENTS (enter information by section number—see instructions)

ir out here

Generator Annual Hazardous Waste Report (cont.)

This report is for the calendar year ending December 31, 1981.

VII. GENERATOR'S EPA I.D. NO.

W IA ID I1 12 10 15 11 31 91 51 7

IX. FACILITY'S EPA I.D. NO.

O | R | D | O | 8 | 9 | 4 | 5 | 2 | 3 | 5 | 3

VIII. FACILITY NAME (specify facility to which all wastes on this page were shipped)

CHEM-SECURITY SYSTEMS, INC.

X. FACILITY ADDRESS

Star Route Arlington, OR 97812

XI. TRANSPORTATION SERVICES USED the former and time element areas numbers or an immovement whose services were during 1981. This section to be completed only once. Do not repeat on supplemental allerts.)

XII. V	WAST	A. Description of Waste	B. DOT Hazard	C. EPA H. Waste (see instr	e No.	D. Amount of Waste	E. Unit of Measure
	1	Endosulfan	18	P 05 0 35 38 43 46	1 1 1	5) 1 1 1 1 1 1 3 5 7 5	P 60
	2	Ethiofencarb	1,8	111	111	1 1 1 1 1 1 2 1 00	P
	3	Ethion	1.8	111	111	1 1 1 1 1 7 5 37	P
	4	Ethoprop	118	111	111	1 1 1 1 1 1 1 1 8 3 8	P
	5	Fenitrothion	1,8	111	111	,,,,,,,60	P
-	6	Fensulfothion	1,8	111	111	, , , , 4,9,84	P
	7	Fenthion	1,8	111	111	1 1 1 1 1 1,00	P
	8	Fenvalerate	1,8	111	111	, , , , , , 5,48	P
	9	FMC 27289	1.8	111	111	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P
	10	PMC 35001	1,8	111	111	1 7,5	P
	11	FMC 45498	1,8	111	111	111111011	P
	12	Fonofos	1,8	111	111	111114,4,5	P
20		· · · · · · · · · · · · · · · · · · ·	1. 11				

XIII. COMMENTS (enter information by section number—see instructions)

ar out here

Generator Annual Hazardous Waste Report (cont.)

This report is for the calendar year ending December 31, 1981.

Date rec'd:

Rec'd by:

VIII. FACILITY NAME tspecify facility to which all wastes of this page were shipped?

VII. GENERATOR'S EPA I.D. NO.

T/A C

CHEM-SECURITY, INC.

GWAD11210151113191517111

X. FACILITY ADDRESS

IX. FACILITY'S EPA I.D. NO.

Star Route

[F]O|R|D|0|8|9|4|5|2|3|5|3

Arlington, OR 97812

XI. TRANSPORTATION SERVICES USED (Liv) the name and EPA likewish atom numbers of all transporters whose services were used charge (1981). This section to be completed poly once. Do not repeat on supplemental sheets.)

equence #	TE IDENTIFICATION A. Description of Waste	B. DOT Hazard	C. EPA Hazardous Waste No. (see instructions)	D. Amount of Waste	E. Unit of
1 1	Formetanate hydrochloride	18	35 38 39 42 41 46 47 50	1 1 1 1 1 1 2 76 S1 39	P
2 2	GCP 3937	1,3	111 111	50	Р
# a 3	GCP 6361	1,3	11111	35	Р
13 4	Tenfennhos	118	111 111	1 1 1 1 1 3 2 2 8	P
1 5	м 3016	1,8	111 111	. 7,5	P
6	м 4170	48	111111	38	P
7	M 4365	48	111 111	. 7,5	P
8	Maneb-zinc		111111	1.75	P
1 4 9	Methamidophos	18	111 111	7, 5, 63	P
10	Methiocarb	18	111 111	.04	P
1100	Methomyl	48	111 111	1.80	P
12	Methoxychlor	1,5	D ₁ O ₁ 1 ₁ 4 ; ; ; U ₁ 2 ₁ 4 ₁ 7 ; ; ;	1 1 1 1 6 1.88	P

XIII. COMMENTS (enter information by section number-see instructions)

Generator Annual Hazardous Waste Report (cont.)

This report is for the calendar year ending December 31, 1981.

Date mod Rec'd by

VII. GENERATOR'S EPA I.D. NO.

GWAD11210151113191517111

IX. FACILITY'S EPA I.D. NO.

[F]O]R]D]O]8]9]4]5]2]3]5]3

VIII. FACILITY NAME (specify facility to which all wastes on this page were shipped)

CHEM-SECURITY SYSTEMS, INC.

X. FACILITY ADDRESS

Star Route Arlington, OR 97812

XI. TRANSPORTATION SERVICES USED (the like name and EPA about manufactures of all transcences whose services were used thiring 1981. This section to be completed bully once. Do not repeat on supplemental sheets.)

XII. WASTE	A. Description of Waste	B. DOT Hazard	C. EPA Hazardous Waste No. (see instructions)	D. Amount of Waste	E. Unit of Measure
42	Monocrotophos	118	35 38 39 44 43 46 47 5	0151 1 1 1 1 1 1 1 1 0 1 0	P 60
2	Naled	1,8	111 111	1 1 1 12161215	P
3	NC 6897	1.8	111 111	8.6	P
4	Oxydemeton-methyl	1:8	111 111	1 1 1 1 141613	P
5	Oxythioquinox	1,3	111 111	0,5	P
资举6	PCNB	1,8	11.1.8.5	1 1 1 1 1 1 2 5 0	P
7	Permethrin	1,8	111 111	1 1 1 1 1 1 1 1 1 1 4 , 8	P
8	Phorate	1,8	P101914 1 1 1	, , , , ,1,5,5,1	P
9	Phosphamidon	1,8	111 111	1 1 1 1 1 712,5	P
10	Pirimicarb	1,8	111 111	1 1 1 1 1 12,7,6	P
11	Proparaite	1.15	111 111	1 1 1 1 1 134618	P
12	Propoxur	1,8	111 111	111111014	P

XIII. COMMENTS (enter information by section number-see instructions)

Generator Annual Hazardous Waste Report (cont.)

This report is for the calendar year ending December 31, 1981.

 VIII. FACILITY NAME topecity (scaliny to which all in this page were shipped)

CHEM-SECURITY SYSTEMS, INC.

X. FACILITY ADDRESS

Star Route

Arlington, OR 97812

IX. FACILITY'S EPA I.D. NO.

[F₁O₁R₁D₁O₁8₁9₁4₁5₁2₁3₁5₁3₁

XI. TRANSPORTATION SERVICES LISED it is the name and EM librarile atten numbers of all transporters whose services were used through the other present to be completed to the present of t

equence	A. Description of Waste	Hazard	C. EPA Hazardous Waste No. (see instructions) D.	Amount of Waste
1 1 1	RE 26744	1 18	35 36 39 42 43 46 47 50 51	1 1 1 1 1 2/5
2	Rotenone	1	111 111 1	11111-04
3	SAN 65381	1 ,3	111 111	1 1 1 1 1 63
2 4	SD 9129-Monocrotophos	1 8	111 111	1 1 1 1 7 1 84
1 1 1 5	SD 14114-Hexakis	1 8	111 111	111112
6 -	Sodium cyanide	1 8	P111016 1 1 1	1 1 1 41 9, 00
7	Sodium hydroxide	0 2	111 111	2, 8, 86
8	Sprint 38	1 8	111 111	76
9	Strychnine	1.8	P:1:0:8	1,1,1,05
= 10	Sulfur ORM-C			1, 3, 50
135,11	TEPP	1 ,8	P:1:1:1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.50
12	Terbufos	1 8		1,7,.55

XIII. COMMENTS (enter information by section number—see instructions)

Generator Annual Hazardous Waste Report (cont.)

This report is for the calendar year ending December 31, 1981.

this page were shipped)

CHEM-SECURITY SYSTEMS, INC.

IX. FACILITY'S EPA I.D. NO.

(F | O| R| D| 0| 8| 9| 4| 5| 2| 3| 5| 3

X. FACILITY ADDRESS

Star Route Arlington, OR 97812

XI TRANSPORTATION SERVICES USED It is the name and Efficient numbers of all transporters whose services were used

quence #	A. Description of Waste	Hazado	Wast	lazardous e No. ructions)	D. Amount of Waste	E. Unit of
ונייייייייייייייייייייייייייייייייייייי	Thiodicarb	1 8	35 38	39 42 47 90	31.6	3 P
2	Thiofanox	1 ,8	P 10 14 15	111	111112.8	
A 3	Toxaphene	1 ,3	U 12 12 14 P 11 12 13	D:0:1:5	1 1 1 1 1 1 3.5	0 P
23.4	Trichlorfon	1 13	111	111	111113.5	O P
1 151 5	UBI 439-1265	1 ,8	111	111	1 1 1 1 1 1 1 1 1 2	5 P
6	UBI R-677	1 18	111	111	1111115	0 P
7	Zinc phosphide	1 ,8	1111	111	1111111.5	0 P
8	ZR 856	3ر 1	111	111	1111114	0 P
9		,		111	بتبيين	
e = 10			111	111		_
13.01		1	111	111		
111112			111	111		

XIII. COMMENTS (enter information by section number—see instructions)

APPENDIX A-2 HAZARDOUS WASTE MANIFESTS FOR 1982 YAKIMA AGRICULTURAL RESEARCH LABORATORY



Department of Environmental Quality

522 SOUTHWEST 5TH AVE PURTLAND, OREGON

MAILING ADDRESS: P.O. EO> 1760, PORTLAND, OREGON 97207

VAD 120513957

June 3, 1982

Ms. A. Jeanne Van Wallendael Chen-Security Systems, Inc. P.O. Box 1866 Bellevue, WA 98009

Na: HW File 4.10 T

lear Ms. Van Wallendael:

We have reviewed Disposal Request No. 1118.1, submitted with your May 26, 1982 letter.

WASTE SOURCE

Yakima Agricultural Research Laboratories USDA SEA AR 3706 W. Nob Hill Blvd. Yakima, WA 98902

MATERIAL(S) REQUESTED FOR DISPOSAL

Hazard Process/Operation For Disposal

Type Cenerating Waste Kow Annual

Scall quantities of Toxic (T;) Pesticide evaluation - 8 drums various pesticides (see attached list)

MATERIAL(S) AUTHORIZED FOR DISPOSAL

Same as above.

METHOD OF DISPOSAL

Trench 10, Procedure 4.

Sincerely,

Eduardo G. Chiong, Engineer Hazardous Waste Section Solid Waste Division

EGC:b ZB1030 Enclosure

cc: Frank Dement, Chem-Security Systems, Inc., Arlington, OR Mr. J. Brooks Brown, Yakima Agricultural Research Laboratories

STAR FOUTE ARLINGTON OR 97812

CHEMICAL DISPUSAL REQUEST



EPA ID NO. ORD 08 945 2353

ANLINGTON (503) 454-2777 BELLEVUE (206) 827-0711 PORTLAND (503) 223-1912 VANCOUVER, B.C. (604) 669-2204

C. Facility A			T DOUT COOK	SEA AR		.PA ID NO. MAIL	
	Nob Hill B	lvd		Billing Ad Nation	oress al Finance (Center	
	. WA 98902				Box 60075		
					leans, LA 70))
D. Business (Contact J. Bro	Fric Walf	hill	Title Admin. A:	Friemologie	Phone (509)) 575-5977/587) 575-5982/587
				Title		rnone s	, , , , , , , , , , , , , , , , , , , ,
WASTE DES	SCRIPTION	for this waste i	product: Mixed t	esticides (I	nsecticides	& Herbicide	s)
11 200		I I SEAN	000 115	Of nome X 350 no	n	ift nom	
B. Process ge	enerating waste: I	Pesticide e	valuation res	earch (Is no	t a product:	ion process)	
			3 55-gallon di	Unit o	of Measure		
	s (Complete As R al State at 70° F:	equired)		6 Phases or I	Layers (for liqui	ds only)	
1, 11193104	in State at 70 T.			0, 110303 01			
Powde	er Solid Liq	uid Sludge		One	Two	Multiple	
X	_	<				_ X	•
2. Density	/ (as weight/unit)			·	% %	Others	% %
	By Weight						
Total	% Dissolved	1% Su	spended%	, /. Flash Poin	· [Closed Cup Op	Specify Specify
4. pH (inc	dicate range)			8. Sulfur:	0-Tr	<1%	>1%
5 Viscosi	ty						Specify
J. V15COS1	τγ			9. Organo-Ch	lorine O-Tra	ce <1%	>1' %
E. Waste Con	nposition - Accou	unt for 100%.	See attached	lists			
			See attached constituent; use N				
						CHARAC	TERISTIC COLOR
	PM, or % as appro		constituent; use N	/A if not applicable		CHARAC	
Indicate P	PM, or % as appro	opriate for each	constituent; use N	/A if not applicable		CHARAC	
Indicate P	PM, or % as appro	Ag	constituent; use N	/A if not applicable			
Vater HCI	PM, or % as appro	Ag As	constituent; use N	/A if not applicable			TERISTIC COLOR
Water HCI HF H ₂ SO ₄	PM, or % as appro	Ag As Ba	RANGE	/A if not applicable	RANGE		TERISTIC COLOR
Nater HCI HF H ₂ SO ₄ HNO ₃	PM, or % as appro	Ag As Ba Cd	RANGE	/A if not applicable ORGANICS (SPECIFY)	RANGE	DIST	TERISTIC COLOR
Water HCI HF H ₂ SO ₄	PM, or % as appro	Ag As Ba Cd Cr	RANGE	/A if not applicable	. RANGE	DIST	TERISTIC COLOR
Water HCI HF HNO3 H3PO4 NaOH	PM, or % as appro	Ag As Ba Cd Cr Cu	RANGE	PESTICIDES (SPECIFY)	RANGE	DIST	TERISTIC COLOR NCTIVE ODOR RANGE
Water HCI HF HNO ₃ H ₃ PO ₄	PM, or % as appro	Ag As Ba Cd Cr Cu Hg	RANGE	PESTICIDES (SPECIFY) Dioxin (ppb)	RANGE RANGE	DIST	TERISTIC COLOR NCTIVE ODOR RANGE
Mater HCI HF HNO ₃ H ₃ PO ₄ NaOH Ca (OH) ₂	PM, or % as appro	Ag As Ba Cd Cr Cu Hg	RANGE	PESTICIDES (SPECIFY) Dioxin (ppb) 2,4-D	RANGE	DIST	TERISTIC COLOR NCTIVE ODOR RANGE
Mater HCI HF HNO ₃ H ₃ PO ₄ NaOH Ca (OH) ₂ NH ₄ OH	PM, or % as appro	Ag As Ba Cd Cr Cu Hg F	RANGE	PESTICIDES (SPECIFY) Dioxin (ppb) 2,4-D	RANGE	DIST	TERISTIC COLOR NCTIVE ODOR RANGE
Mater HCI HF HNO3 H3PO4 NaOH Ca (OH)2 NH4OH Cyanide CaCO3	PM, or % as appro	Ag As Ba Cd Cr Cu Hg F Pb Se Zn	RANGE	PESTICIDES (SPECIFY) Dioxin (ppb) 2,4-D 2,4,5-T	RANGE	DISTI OTHER CONSTITUENT	TERISTIC COLOR NCTIVE ODOR RANGE
Mater HCI HF HNO3 H3PO4 NaOH Ca (OH)2 NH4OH Cyanide CaCO3	PM, or % as appro	Ag As Ba Cd Cr Cu Hg F Pb Se Zn	RANGE	PESTICIDES (SPECIFY) Dioxin (ppb) 2,4-D 2,4,5-T	RANGE	DISTI OTHER CONSTITUENT	TERISTIC COLOR NCTIVE ODOR RANGE

(See CFR 40 Part 261) If so, please list hazardous waste number that applies to the description: See at tached list

INSVO

G is this waste a regulate that apply. See att	ached fists			
Materials Transportation	on Act? <u>Yes</u> and 173 for "Hazardor	us Materials" list and chara	cteristics)	Transportation pursuant to the Haz
b. DOT container(s) _ c. Hazard class: A co	17 SC mbination of "F			osives. ORM-A and ORM-E."
SHIPPING REQUIREMENT A. Indicate how this waste		ped:		
Size of Container(s) 5				
B. Shipping frequency. Quantity 8		F	er <u>year (one tin</u>	ne)
C. Transportation equipm	ent requirements (e.g.	for bulk liquids state requi	red tanker specificatio	ons)
D. Service & scheduling sp	pedial instructions:			
E. Service & Scheduling C	ontact.			_ Telephone
	ediately responsible fo of my knowledge and a	or obtaining the informati	on. I believe that the	ted in this document. Based on my ine submitted information is true, acceptable been disclosed.
Date		Title	- 15.	Signature
THIS SECTION IS FOR C	SSI SITE OPERATION [NS Supplemental request		
B. Proposed Disposal Math	nod.			
				Six Digit Code
				_Six Digit Code
A. Primary Proposed Met B. Alternate Proposed Met C Comments	had Approved Extend Approved Extend	Test Approved D D		Date
A. Primary Proposed Metl B. Alternate Proposed Me	had Approved E thad Approved C	Test Approved D D	itle	Date
A. Primary Proposed Metl B. Alternate Proposed Me	had Approved E thad Approved C	D Not Approved D T	itle	Date
A. Primary Proposed Metl B. Alternate Proposed Me	had Approved E. thad Approved C	D Not Approved □ □ □ Not Approved □ □ □	itle	Date
A. Primary Proposed Metl B. Alternate Proposed Me	had Approved E. thad Approved C	D Not Approved D T	itle	Date
A. Primary Proposed Metl B. Alternate Proposed Me	had Approved E	D Not Approved D T	tle	Date
A. Primary Proposed Metl B. Alternate Proposed Me	had Approved E	I for Approved I D Not Approved I T	tle	Date

STAR ROUTE, ARLINGTON, OR. 97812

CHEMICAL TRANSPORTATION MANIFFST

ID. NO. CRP 08 945 2353 ARLINGTON (503) 454-2777

PORTLAND (503) 223-1912

24366

BELLEVUE (206) 827-0711 VANCOUVER, B.C. (604) 688-7612 GENERATOR Yakima Agric. Res. Lab., HSD/ ARS ID. NO. WAD 12 051 3957 ADDRESS 3706 W Nob Hill Blyd, Yakima, WA 98902 PHONE (509) 575 5877 WASTE DESCRIPTION CONTAINER GAL. LB. FT. QUANTITY TYPE Sec List Attached To This Form 01 55 Dru 98 7.36 DOT SHIPPING NAME Rerbicides-Dry. NOS DOTHAZARD CLASS Poison & <SOLID > OTHER _ PHYSICAL STATE (circle) LIQUID SLUDGE TOXIC : CORROSIVE IGNITABLE REACTIVE OTHER_____ MAJOR HAZARD (circle) SPECIAL INSTRUCTIONS (HANDLING/EMERGENCY) IN THE EVENT OF A SPILL, CONTACT EITHER OF THE CHEM-SECURITY SYSTEMS OFFICES AND/OR CONTACT, IN THE UNITED STATES, THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD (800) 424-8802, OR CONTACT, IN CANADA, TRANSPORT CANADA (613) 996-6666 FOR EMERGENCY ASSISTANCE. Tride to all materials furnished for disposal herein shall be deemed to be vested in Chem-Security Systems, Inc., immediately upon acceptance of such materials by Chem-Security Systems, Inc., from the generator or transporter. The generator shall have no right to recovery nor any credit for the potential value of any substances contained in such materials furnished for disposal, except as separately agreed in writing by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will be in accordance with procedures approved by the Oregon Department of Environmental Quality and the United States Environmental Protection Agency. The is to certify that the above-named materials are properly classified, described, packaged, marked, labeled and are in proper condition for transportation according to the applicable regulations of the U.S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated by the authorized agent of the generator: DATE 'C' GENERATOR SIGNATURE JTRANSPORTER____ _ID. NO. _ PHONE ADDRESS__ DATE TRANSPORTER SIGNATURE_ TREATMENT FACILITY OR COLLECTION SITE _ID. NO. _____ PHONE ___ ADDRESS DATE _____ SIGNATURE _ ALTERNATE TRANSPORTER NO. 1 ID. NO. _____ ADDRESS__ PHONE ___ TRANSPORTER SIGNATURE______ _DATE ______ **ALTERNATE** TRANSPORTER NO. 2 ID. NO. ___ PHONE ADDRESS_ TRANSPORTER SIGNATURE_____ DATE ALTERNATE FACILITY ID. NO. **ADDRESS** CSSI REQ. NO. BILL OF LADING NO. WEIGHT TICKET NO. _____ GROSS

Manifest 24366

Chemical	Formulation	Hazard Class	ID#	EPA#	RQ=	Comments	Net Weight	Gross Weight
Chlorbromuron	50W						5.0	10.0
Cyanazine	80W						14.4	18.0
Metobromuron	50W						18.0	36.0
Procyazine	W08						15.2	19.0
Secbumeton	8011						12.0	15.0
							64.6	98.0

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.



ID. NO. <u>CSD</u> 08 945 2353 ARLINGTON (503) 454-2777 BELLEVUE (206) 827-0711

PORTLAND (503) 223-1912 VANCOUVER, B.C. (604) 688-7612

	Agric, Res. Lab., USDA/ARS					
ADDRESS 3706 W No	b Hill Blvd, Yakima, WA 98902			PHON	IE (509) 57	5 587
WA	ASTE DESCRIPTION		AINER	GAL.	LB.	FT
		QUANTITY	TYPE			
See List Attacher	d To This Form	01	Drum	55	160.6	7.36
DOT SHIPPING NAME_I	Herbicides-Dry&Liquid, NOS DC	T HAZARD	CLASS Poi	soa B		
PHYSICAL STATE (circle	SOLID LIQUID	SLUDGE	OTHE	R		
MAJOR HAZARD (circle) TOXIC CORROSIVE IGNITAB	LE REACT	IVE OTHE	R		
SPECIAL INSTRUCTION	S (HANDLING/EMERGENCY)	. E				
GUARD (800)	124-8802, OR CONTACT, IN CAN	ADA, TRAN	SPORT CA	E CENTEI	13) 996-60	666
Tritle to all materials furnished for disposal agenerator or transporter. The generator she writing by Chem-Security Systems, Inc. D. United States Enveronmental Protection Age. This is to certify that the above-named ma	FOR EMERGENCY AS herein shall be deemed to be vested in Chem-Security Systems, all have no right to recovery nor any credit for the potential value o isposal operations by Chem-Security Systems, Inc., will be in ac	ADA, TRAN SISTANCE. Inc., immediately up I any substances cont ordance with proced	ISPORT CA on acceptance of suc tained in such material lures approved by the r condition for transa	NADA (6 th materials by Cl as furnished for di a Oregon Departm	hem-Security System isposal, except as se- nent of Environment	ms, Inc., from operately agrical Quality an
Tritle to all materials furnished for disposal in generator or transporter. The generator she writing by Chem-Security Systems, Inc. D. United States Environmental Protection Age. This is to certify that the above-named ma	FOR EMERGENCY AS: herein shall be deemed to be vested in Chem-Security Systems, all have no right to recovery nor any credit for the potential value o insposal operations by Chem-Security Systems, Inc., will be in actincy steries are properly classified, described, packaged, marked, labs	ADA, TRAN SISTANCE. Inc., immediately upit I any substances cont ordance with proced field and are in prope- uthorized agent of the	on acceptance of suctained in such material lures approved by the r condition for transa- generator;	ANADA (6 th materials by Cl as furnished for di a Oragon Departm portation according	hem-Security System isposal, except as se- nent of Environment	ms, Inc., from operately agrical Quality and regulations of
Tritle to all materials furnished for disposal generator or transporter. The generator ship writing by Chein-Security Systems, Inc. Durited States Environmental Protection Age. This is to certify that the above-named ma	FOR EMERGENCY AS: herein shall be deemed to be vested in Chem-Security Systems, all have no right to recovery not any credit for the potential value o isposal operations by Chem-Security Systems, Inc., will be in ac- incy sterials are properly classified, described, packaged, marked, labe U.S. Environmental Protection Agency. Signed and dated by the a	ADA, TRAN SISTANCE. Inc., immediately upil any substances cont cordance with proced fied and are in prope uthorized agent of the	on acceptance of suctained in such material lures approved by the r condition for transa- generator:	ANADA (6 th materials by Cl as furnished for di a Oregon Departm contation accordin	hem-Security Systemisposal, except as senent of Environment by to the applicable	ms, Inc., from parately agrical Quality and regulations of
Tritle to all materials furnished for disposal generator or transporter. The generator she writing by Chem-Security Systems, Inc. D United States Environmental Protection Age. This is to certify that the above-named mu.S.Department of Transportation and the GENERATOR SIGNATUR TRANSPORTER	FOR EMERGENCY AS: herein shall be deemed to be vested in Chem-Security Systems, all have no right to recovery nor any credit for the potential value o imposal operations by Chem-Security Systems, Inc., will be in ac- incy sterials are properly classified, described, packaged, marked, labe U.S. Environmental Protection Agency. Signed and dated by the a	ADA, TRAN SISTANCE. Inc., immediately upit any substances cont cordance with proced led and are in prope uthorized agent of the	on acceptance of suctained in such material lures approved by the r condition for transa generator:	ch materials by Chas furnished for die Oregon Department of the Constitution according to the Charles of the Ch	hem-Security System spoeal, except as senent of Environment or the applicable.	ms, Inc., from parately agrical Quality and regulations of
Tritle to all materials furnished for disposal generator or transporter. The generator she writing by chem-Security Systems, Inc. D United States Environmental Protection Age. This is to certify that the above-named male. S. Department of Transportation and the L. GENERATOR SIGNATUR. TRANSPORTER.	FOR EMERGENCY AS: herein shall be deemed to be vested in Chem-Security Systems, all have no right to recovery nor any credit for the potential value o isposal operations by Chem-Security Systems, Inc., will be in aci incy steriels are properly classified, described, packaged, marked, lablu U.S. Environmental Protection Agency. Signed and dated by the a	ADA, TRAN SISTANCE. Inc., immediately upit any substances cont cordance with proced thed and are in proper uthorized agent of the	on acceptance of suctained in such material lures approved by the r condition for transa- generator:	ch materials by Chas furnished for die Oregon Department of the Oregon	hem-Security System is posel, except as senent of Environment of the applicable of t	ms, Inc., from parately agrical Quality and regulations of
Tritle to all materials furnished for disposal generator or transporter. The generator shi writing by Chem-Security Systems, Inc. Durited States Environmental Protection Age. This is to certify that the above-named male. S. Department of Transportation and the U.S. Department of Transportation and Trans	FOR EMERGENCY AS: herein shall be deemed to be vested in Chem-Security Systems, all have no right to recovery nor any credit for the potential value o isposal operations by Chem-Security Systems, Inc., will be in aci incy steriels are properly classified, described, packaged, marked, lab U.S. Environmental Protection Agency. Signed and dated by the e	ADA, TRAN SISTANCE. Inc., immediately upil any substances cont cordance with proced fied and are in prope uthorized agent of the	on acceptance of suctained in such material lures approved by the r condition for transa- generator:	ch materials by Class furnished for die Oregon Department of the Oregon	hem-Security System is posel, except as senent of Environment of the applicable of t	ms, Inc., froi parately agn at Quality an regulations of
Tritle to all materials furnished for disposal generator or transporter. The generator she writing by Chem-Security Systems, Inc. Durited States Environmental Protection Age. This is to certify that the above-named male. Department of Transportation and the U.S. Department of Transportation and Transporter SIGNATUR. TRANSPORTER	FOR EMERGENCY AS: herein shall be deemed to be vested in Chem-Security Systems, all have no right to recovery nor any credit for the potential value o isposal operations by Chem-Security Systems, Inc., will be in ac- ency sterials are properly classified, described, packaged, marked, labe U.S. Environmental Protection Agency. Signed and dated by the a	ADA, TRAN SISTANCE. Inc., immediately upil any substances cont cordance with proced fled and are in prope uthorized agent of the	on acceptance of suctained in such material lures approved by the condition for transa- generator:	th materials by Class furnished for de Oregon Department of the Oregon	hem-Security System is posel, except as senent of Environment of the applicable of t	ms, Inc., from parately agrical Quality and regulations of
Tritle to all materials furnished for disposal generator or transporter. The generator shi writing by Chein-Security Systems, Inc. Durited States Environmental Protection Age. This is to certify that the above-named male. S. Department of Transportation and the U.S. Department of Transportation and the U.S. Department of Transportation and the U.S. Department of Transportation and Transportation and the U.S. Department of Transportation and the U.S. Department of Transportation and Transporter SIGNATUR. TRANSPORTER SIGNATUR. TRANSPORTER SIGNATUR. TREATMENT FACILITY O COLLECTION SITE	FOR EMERGENCY AS: herein shall be deemed to be vested in Chem-Security Systems, all have no right to recovery nor any credit for the potential value o imposal operations by Chem-Security Systems, Inc., will be in ac- incy sterials are properly classified, described, packaged, marked, labe U.S. Environmental Protection Agency. Signed and dated by the a	ADA, TRAN SISTANCE. Inc., immediately upil any substances contordance with procedured and are in propeuthorized agent of the	on acceptance of suc iained in such materia lures approved by the r condition for transa- generator:	ch materials by Chas furnished for dispersion according to the popular of the pop	hem-Security System is posel, except as senent of Environment of the applicable of t	ms, Inc., from parately agrical Quality and regulations of
Tritle to all materials furnished for disposal generator or transporter. The generator she writing by Chern-Security Systems, Inc. Durited States Environmental Protection Age. This is to certify that the above-named male. Department of Transportation and the U.S. Department of Transportation and Transporter SIGNATUR. TRANSPORTER. ADDRESS. TRANSPORTER SIGNATION COLLECTION SITE. ADDRESS. SIGNATURE.	FOR EMERGENCY AS: herein shall be deemed to be vested in Chem-Security Systems, all have no right to recovery nor any credit for the potential value o isposal operations by Chem-Security Systems, Inc., will be in ac- ency sterials are properly classified, described, packaged, marked, labe U.S. Environmental Protection Agency. Signed and dated by the a	ADA, TRAN SISTANCE. Inc., immediately upil any substances contordance with proceduled and are in propouthorized agent of the	on acceptance of suctained in such material lures approved by the r condition for transa- generator:	ANADA (6 ch materials by Ch als furnished for de to Oregon Departir contation accordin DATE ID. NO PHONE DATE ID. NO DATE DATE DATE DATE	hem-Security System is posel, except as seneral of Environment of the applicable of	ms, Inc., from parately agrical Quality and regulations of
Tritle to all materials furnished for disposal generator or transporter. The generator she writing by Chern-Security Systems. Inc. Durited States Environmental Protection Age. This is to certify that the above-named male. Department of Transportation and the U.S. Department of Transportation and U.	FOR EMERGENCY AS: herein shall be deemed to be vested in Chem-Security Systems, all have no right to recovery nor any credit for the potential value o imposal operations by Chem-Security Systems, Inc., will be in aci ency sterials are properly classified, described, packaged, marked, labl U.S. Environmental Protection Agency. Signed and dated by the a	ADA, TRAN SISTANCE. Inc., immediately upil any substances contordance with procedured and are in propouthorized agent of the	on acceptance of suctained in such matters used in such matters used by the condition for transaction representation:	ANADA (6 ch materials by Ch als furnished for di a Oregon Departir contation accordin DATE 1 ID. NO PHONE DATE ID. NO PHONE DATE ID. NO PHONE ID. NO PHONE ID. NO	hem-Security System is posel, except as seneral of Environment of the applicable of	ms, Inc., from parately agrical Quality and regulations of
Tritle to all materials furnished for disposal generator or transporter. The generator she writing by Chern-Security Systems, Inc. D United States Environmental Protection Age. This is to certify that the above-named male. S. Department of Transportation and the L. S. Department of Transporter SIGNATURE ADDRESS SIGNATURE ALTERNATE TRANSPORTER NO. 1 ADDRESS ADDRESS	FOR EMERGENCY AS: herein shall be deemed to be vested in Chem-Security Systems, all have no right to recovery nor any credit for the potential value o imposal operations by Chem-Security Systems, Inc., will be in aci ency sterials are properly classified, described, packaged, marked, lablu U.S. Environmental Protection Agency. Signed and dated by the a	ADA, TRAN SISTANCE. Inc., immediately upil any substances contordance with procedured and are in propositional agent of the	on acceptance of suctained in such material lures approved by the r condition for transa- generator:	ANADA (6 ch materials by Cl als furnished for di a Oregon Departir contation accordin DATE 1 ID. NO PHONE DATE ID. NO PHONE DATE ID. NO PHONE PHONE DATE DATE ID. NO PHONE DATE DATE ID. NO PHONE DATE ID. NO PHONE DATE ID. NO	hem-Security Systemsposal, except as senent of Environment of the applicable	ms, Inc., from parately agrical Quality and regulations of
Tritle to all materials furnished for disposal generator or transporter. The generator she writing by Chem-Security Systems, Inc. Durited States Environmental Protection Age. This is to certify that the above-named male. Department of Transportation and the U.S. Department of Transportation and U.S. Department o	FOR EMERGENCY AS: herein shall be deemed to be vested in Chem-Security Systems, all have no right to recovery nor any credit for the potential value o inspotal operations by Chem-Security Systems, Inc., will be in aci incy steriels are properly classified, described, packaged, marked, lab U.S. Environmental Protection Agency. Signed and dated by the a	ADA, TRAN SISTANCE. Inc., immediately upil any substances contordance with procedured and are in propeuthorized agent of the	on acceptance of suctained in such matteril lures approved by the r condition for transa- generator:	ANADA (6 ch materials by Cl als furnished for de a Oregon Departir contation accordin DATE 1 ID. NO PHONE DATE ID. NO PHONE DATE ID. NO PHONE DATE DATE ID. NO PHONE DATE ID. NO PHONE DATE ID. NO PHONE DATE	hem-Security Systemsposal, except as senent of Environment of the applicable	ms, Inc., from parately agrical Quality and regulations of
Tritle to all materials furnished for disposal generator or transporter. The generator she writing by Chein-Security Systems, Inc. D. United States Environmental Protection Age. This is to certify that the above-named male. S. Department of Transportation and the U.S. Department of Transporter SIGNATURE ADDRESS SIGNATURE ALTERNATE TRANSPORTER SIGNATURATION ALTERNATE TRANSPORTER NO. 2	FOR EMERGENCY AS: herein shall be deemed to be vested in Chem-Security Systems, all have no right to recovery nor any credit for the potential value o imposal operations by Chem-Security Systems, Inc., will be in acciency atterials are properly classified, described, packaged, marked, labe U.S. Environmental Protection Agency. Signed and dated by the a E URE	ADA, TRAN SISTANCE. Inc., immediately upil any substances contordance with procedured and are in propositional agent of the	on acceptance of suctained in such material uses approved by the condition for transagementator:	NADA (6 ch materials by Class furnished for do to Oregon Departir DATE	hern-Security Systemsposal, except as senent of Environment of the applicable	ms, Inc., froi parately agrial Quality and regulations of
Tritle to all materials furnished for disposal generator or transporter. The generator she writing by Chein-Security Systems. Inc. Durited States Environmental Protection Age. This is to certify that the above-named male. Department of Transportation and the U.S. Department of Transportation and U.S. Department of U.	FOR EMERGENCY AS: herein shall be deemed to be vested in Chem-Security Systems, all have no right to recovery nor any credit for the potential value o imposal operations by Chem-Security Systems, Inc., will be in aci ency steriels are properly classified, described, packaged, marked, labi U.S. Environmental Protection Agency. Signed and dated by the aci E	ADA, TRAN SISTANCE. Inc., immediately upil any substances contordance with proceduled and are in propeuthorized agent of the	on acceptance of suctained in such material uses approved by the condition for transagementator:	NADA (6 ch materials by Class furnished for de o'regon Departir DATE ID. NO PHONE DATE ID. NO	hem-Security System is posel, except as seneral of Environment of Environment of the applicable of the	ms, Inc., froi parately agrial Quality and regulations of
Tritle to all materials furnished for disposal generator or transporter. The generator she writing by Chein-Security Systems. Inc. Durited States Environmental Protection Age. This is to certify that the above-named male. Department of Transportation and the U.S. Department of Transportation and U.S. Department of Transportation and U.S. Department of U.S. Department of Transportation and U.S. Department of U.	FOR EMERGENCY AS: herein shall be deemed to be vested in Chem-Security Systems, all have no right to recovery nor any credit for the potential value o imposal operations by Chem-Security Systems, Inc., will be in ac- sincy atterials are properly classified, described, packaged, marked, labe U.S. Environmental Protection Agency. Signed and dated by the a- E URE URE	ADA, TRAN SISTANCE. Inc., immediately upil any substances contordance with procedure and are in propeuthorized agent of the	on acceptance of suctained in such matters used in such matters used by the condition for transagenerator:	NADA (6 ch materials by Chas furnished for de to Oregon Departin DATE ID. NO PHONE DATE ID. NO	hem-Security System is posel, except as senent of Environment of the applicable of t	ms, Inc., froi parately agnial Quality and regulations of

Chemical	Formulation	Hazard Class	ID#	EPA#	RQ=	Comments	Net Weight	Gross Weight
Atrazine	W08						1.2	1.5
Atrazine +Metolachlor	4.5L						4.4	22.5
Benefin	1.5E						1.5	10.8
Butylate	6E						12.0	22.3
C G A 17020	5%G						0.4	8.0
C G A 17020	10%G						0.8	8.0
G A 29696	W08						1.6	2.0
D C P A	75W						6.0	8.0
Metolachlor	5%G						0.4	3.0
Metolachlor	10%G						0.8	8.0
Napropamide	50W						5.0	10.0
Prometon +Ametryn	2.07L						2.3	11.3
Prometon +Pentachlorophenol	WEI	EHW		P090			1.0	19.7
Propachlor	65W						5.2	8.0
Simazine	4L						4.0	12.3
							47.1	160.6

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.



ID. NO. ORD 08 945 2353 ARLINGTON (503) 454-2777 PORTLAND (503) 223-1912

QUANTITY TYPE	GENERATOR Yakima Agric. Res. Lab., USDA/	ARS	ID. NO). <u>KAD 1</u> 2	2 051 395	7
See List Attached To This Form O1 Drum 55 120.8 7. DOT SHIPPING NAME Insecticides Dry&Liquid, NOSDOT HAZARD CLASS Poison B PHYSICAL STATE (circle) SOLID LIQUID SLUDGE OTHER MAJOR HAZARD (circle) TOXIC CORROSIVE IGNITABLE REACTIVE OTHER SPECIAL INSTRUCTIONS (HANDLING/EMERGENCY). IN THE EVENT OF A SPILL CONTACT EITHER OF THE CHEM-SECURITY SYSTEMS OFFICES AND/OR CONTACT, IN THE UNITED STATES, THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD 1800) 424-8802, OR CONTACT IN CANADA TRANSPORT CANADA 1613) 996-6566 file to all relatives translations of principles of the design of the control of the contro	ADDRESS 3796 W Nob Hill Blvd, Yakima, WA	98902		PHON	NE (509) 57	75 59
See List Attached To This Form O1 Drum 55 120.8 7. DOT SHIPPING NAME Insecticides Dry&Liquid, NOSDOTHAZARD CLASS Poison B PHYSICAL STATE (circle) SOLID LIQUID SLUDGE OTHER MAJOR HAZARD (circle) TOXID CORROSVE IGNITABLE REACTIVE OTHER SPECIAL INSTRUCTIONS (HANDLING/EMERGENCY) IN THE EVENT OF A SPILL, CONTACT BITHER OF THE CHEM-SECURITY SYSTEMS OFFICES AND/OR CONTACT, IN THE UNITED STATES, THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD (800) 424-8802, OR CONTACT, IN CANADA, TRANSPORT CANADA (613) 996-6656 FOR EMERGENCY ASSISTANCE. This is all instrume furnitives for deposal forms shall be denoted to CONTACT, IN CANADA, TRANSPORT CANADA (613) 996-6656 FOR EMERGENCY ASSISTANCE. The A is continued for deposal forms shall be denoted to a state in Commission states in Commis	WASTE DESCRIPTION	CON	TAINER	GAL.	LB.	FT,
DOT SHIPPING NAME INSECTICIDES SOLID LIQUID SLUDGE OTHER MAJOR HAZARD (circle) TOXIC CORROSIVE IGNITABLE REACTIVE OTHER SPECIAL INSTRUCTIONS (HANDLING/EMERGENCY) IN THE EVENT OF A SPILL, CONTACT EITHER OF THE CHEM-SECURITY SYSTEMS OFFICES AND/OPE CONTACT, IN THE UNITED STATES, THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD (800) 424-8802, OR CONTACT, IN CANADA, TRANSPORT CANADA (613) 996-6666 FOR EMERGENCY ASSISTANCE. FOR EMERGENCY ASSISTANCE. FOR EMERGENCY ASSISTANCE. FOR EMERGENCY ASSISTANCE. IN THE EVENT OF A SPILL, CONTACT, IN CANADA, TRANSPORT CANADA (613) 996-6666 FOR EMERGENCY ASSISTANCE. FOR EMERGENCY ASSISTANCE. FOR EMERGENCY ASSISTANCE. FOR EMERGENCY ASSISTANCE. IN THE BOOK AND		QUANTITY	TYPE			
PHYSICAL STATE (circle) SOLID LIQUID SLUDGE OTHER MAJOR HAZARD (circle) TOXIC CORROSIVE IGNITABLE REACTIVE OTHER SPECIAL INSTRUCTIONS (HANDLING/EMERGENCY) IN THE EVENT OF A SPILL, CONTACT EITHER OF THE CHEM-SECURITY SYSTEMS OFFICES AND/OR CONTACT, IN THE UNITED STATES, THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD (800) 424-8802, OR CONTACT, IN CANADA, TRANSPORT CANADA (613) 996-6666 FOR EMERGENCY ASSISTANCE. Tile to all misteriese furnished for disposal breen shall be deemed to be visited in Chem-Security Systems, inc., minediately upon exceptance of such materials by Chem-Security Systems, inc., within the Diversinger materials in a proper continue of transportation seconding to the special processor of transportation seconding to the special processor. September 4 regulation of transportation and the U.S. Environmental Protection Agency. Signed and dated by the surhorized agent of the generator. SENERATOR SIGNATURE DATE TRANSPORTER SIGNATURE DATE SIGNATURE DATE SIGNATURE SIGNATURE DATE SIGNATURE SIGNATURE SIGNATURE DATE SIGNATURE SIGNATURE SIGNATURE DATE SIGNATU	See List Attached To This Form	01	Drum	55	120.8	7.3
PHYSICAL STATE (circle) SOLID LIQUID SLUDGE OTHER MAJOR HAZARD (circle) TOXIC CORROSIVE IGNITABLE REACTIVE OTHER SPECIAL INSTRUCTIONS (HANDLING/EMERGENCY) IN THE EVENT OF A SPILL, CONTACT EITHER OF THE CHEM-SECURITY SYSTEMS OFFICES AND/OR CONTACT, IN THE UNITED STATES, THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD (800) 424-8802, OR CONTACT, IN CANADA, TRANSPORT CANADA (613) 996-6666 FOR EMERGENCY ASSISTANCE. Tile to all misteriese furnished for disposal breen shall be deemed to be visited in Chem-Security Systems, inc., minediately upon exceptance of such materials by Chem-Security Systems, inc., within the Diversinger materials in a proper continue of transportation seconding to the special processor of transportation seconding to the special processor. September 4 regulation of transportation and the U.S. Environmental Protection Agency. Signed and dated by the surhorized agent of the generator. SENERATOR SIGNATURE DATE TRANSPORTER SIGNATURE DATE SIGNATURE DATE SIGNATURE SIGNATURE DATE SIGNATURE SIGNATURE SIGNATURE DATE SIGNATURE SIGNATURE SIGNATURE DATE SIGNATU	DOT SHIPPING NAME Insecticides-Dry&Liquid.	NOSDOT HAZARD	CLASS Pol	son B		
MAJOR HAZARD (circle) TOXIC CORROSIVE IGNITABLE REACTIVE OTHER_ SPECIAL INSTRUCTIONS (HANDLING/EMERGENCY) IN THE EVENT OF A SPILL, CONTACT EITHER OF THE CHEM-SECURITY SYSTEMS OFFICES AND/OR CONTACT, IN THE UNITED STATES, THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD (800) 424-8802, OR CONTACT, IN CANADA, TRANSPORT CANADA (613) 996-6666 FOR EMERGENCY ASSISTANCE. Interest of all interests furnished for deposed herein what he deemed to be vested in Chem-Security Systems, Inc., Disposal operations of security Systems, Inc., Disposal operations by Chem-Security Systems, Inc., Disposal operations of Environmental Protection Agency. In a to senth further disposal shared materials are properly classified, described, packaged, marked, liabeled and are in proper condition for transportation according to the applicable regulation. S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dered by the authorised agent of the generator. SENERATOR SIGNATURE ID. NO. ADDRESS PHONE RANSPORTER SIGNATURE DATE ID. NO.						
IN THE EVENT OF A SPILL, CONTACT EITHER OF THE CHEM-SECURITY SYSTEMS OFFICES AND/OR CONTACT, IN THE UNITED STATES, THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD (800) 424-8802, OR CONTACT, IN CANADA, TRANSPORT CANADA (613) 996-6666 FOR EMERGENCY ASSISTANCE. It is all insurant furnished for deposel here in what he deemed is to restance in a contact of the period of the deemed in the contact of the contact o						
IN THE EVENT OF A SPILL, CONTACT EITHER OF THE CHEM-SECURITY SYSTEMS OFFICES AND/OR CONTACT, IN THE UNITED STATES, THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD (800) 424-8802, OR CONTACT, IN CANADA, TRANSPORT CANADA (613) 996-6666 FOR EMERGENCY ASSISTANCE. Is to all materials furnished for disposal herein shall be deemed to be vested in Chem-Security Systems, Inc., immediately upon acceptance of each materials by Chem-Security Systems, Inc., immediately upon acceptance of each materials by Chem-Security Systems, Inc., immediately upon acceptance of each materials by Chem-Security Systems, Inc., immediately upon acceptance of each materials by Chem-Security Systems, Inc., immediately upon acceptance of each materials by Chem-Security Systems, Inc., immediately upon acceptance of each materials by Chem-Security Systems, Inc., immediately upon acceptance of each materials by Chem-Security Systems, Inc., immediately upon acceptance of each materials by Chem-Security Systems, Inc., immediately spon acceptance of each materials by Chem-Security Systems, Inc., immediately upon acceptance of each materials by Chem-Security Systems, Inc., immediately spon acceptance of each materials by Chem-Security Systems, Inc., immediately spon acceptance of each materials by Chem-Security Systems, Inc., immediately spon acceptance of each materials by Chem-Security Systems, Inc., immediately spon acceptance of each materials by Chem-Security Systems, Inc., immediately on acceptance of each materials by Chem-Security Systems, Inc., immediately acceptance of each materials by Chem-Security Systems, Inc., immediately of each materials by Chem-Security Systems, Inc., immediately acceptance of each materials by Chem-Security Systems, Inc., immediately acceptance of each materials by Chem-Security Systems, Inc., immediately acceptance of each materials by Chem-Security Systems, Inc., immediately acceptance of each materials by Chem-Security Systems, Inc., immediately acceptance of each materials acceptance of each materials acceptance						-
AND/OR CONTACT, IN THE UNITED STATES, THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD (800) 424-8802, OR CONTACT, IN CANADA, TRANSPORT CANADA (613) 996-6666 FOR EMERGENCY ASSISTANCE. It to all materials furnished for disposal herein shall be deemed to be vested in Chem-Security Systems, Inc., immediately upon acceptance of such materials by Chem-Security Systems, Inc., and the C						256
GUARD (800) 424-8802, OR CONTACT, IN CANADA, TRANSPORT CANADA (613) 996-6666 FOR EMERGENCY ASSISTANCE. It to all materials furnished for disposal herein shall be desended to be visited in Chem-Security Systems, inc., immediately upon acceptance of such materials by Chem-Security Systems, inc., mercation of transportation and the control of transportation of transportation by Chem-Security Systems, inc., materials upon acceptance of such materials by Chem-Security Systems, inc., materials and transportation of transportation of transportation and transportation accept as separative, inc., and be in acceptate with protection spready. In a to certify service is above anomal materials are properly classified, described, packaged, marted, labeled and are in proper condition for transportation according to the applicable regulation of Transportation and the U.S. Environmental Protection Agency. Signed and defend by the authorized agent of the generator. IENERATOR SIGNATURE DATE ANSPORTER ID. NO. DORESS PHONE RANSPORTER SIGNATURE DATE LITERNATE RANSPORTER NO. 1 ID. NO. DORESS PHONE RANSPORTER SIGNATURE DATE LITERNATE RANSPORTER SIGNATURE DATE LITERNATE RANSPORTER NO. 2 ID. NO. DORESS PHONE RANSPORTER SIGNATURE DATE LITERNATE RANSPORTER NO. 2 ID. NO. DORESS PHONE RANSPORTER SIGNATURE DATE LITERNATE RANSPORTER SIGNATURE DATE						
FOR EMERGENCY ASSISTANCE. If to all matures furnished for disposal haren shall be deemed to be visited in Chem-Security Systems, linc. invariation or transporter. The generator shall have no right to recovery not any credit for the potential value of any substances contained in such materials by Chem-Security Systems, linc. Bioparators in Linc. Disposal operations by Chem-Security Systems, linc. Bioparators in Linc. Disposal operations by Chem-Security Systems, linc. Bioparators approved by the Oregon Department of Environmental United States Environmental Protection Agency. Systems, linc., will be in accordance with procedures approved by the Oregon Department of Environmental United States Environmental Protection Agency. Systems, linc., will be in accordance with procedures approved by the Oregon Department of Environmental International Protection Agency. Systems, linc., will be in accordance with procedures approved by the Oregon Department of Environmental Environmental Protection Agency. Systems, linc., will be in accordance with procedures approved by the Oregon Department of Environmental Environmental Protection Agency. Systems, linc., will be in accordance with procedures approved by the Oregon Department of Environmental Environm						
IS Department of Transportation and the U.S. Environmental Protection Agency. Signed and deted by the authorized agent of the generator. IDENTITY OF SIGNATURE TRANSPORTER ADDRESS PHONE TRANSPORTER SIGNATURE TRANSPORTER NO. 1 TRANSPORTER NO. 1 TRANSPORTER NO. 2 TRANSPORTER SIGNATURE TRANSPORTER SIGNATURE TRANSPORTER SIGNATURE TRANSPORTER SIGNATURE TRANSPORTER SIGNATURE TRANSPORTER SIGNATURE TRANSPORTER NO. 2 TRANSPORTER SIGNATURE TRANSPORT	enerator or transporter. The generator shall have no right to recovery nor any credit for the po	anty Systems, Inc., immediately u				
RANSPORTER ID. NO. ADDRESS PHONE RANSPORTER SIGNATURE DATE REATMENT FACILITY OR OLLECTION SITE ID. NO. ADDRESS PHONE IGNATURE DATE LITERNATE RANSPORTER NO. 1 ID. NO. ADDRESS PHONE RANSPORTER SIGNATURE DATE LITERNATE RANSPORTER SIGNATURE DATE LITERNATE RANSPORTER NO. 2 ID. NO. DDRESS PHONE RANSPORTER NO. 2 ID. NO. DDRESS PHONE RANSPORTER SIGNATURE DATE LITERNATE RANSPORTER SIGNATURE DATE LITERNATE RANSPORTER SIGNATURE DATE RANSPORTER SIGNATURE DATE RANSPORTER SIGNATURE DATE		tential value of any substances co	intained in such materia	els furnished for d	isposal, except as se	eparately a
RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DDRESS DDRESS PHONE ID. NO. DDRESS PHONE RANSPORTER NO. 1 DATE LITERNATE RANSPORTER SIGNATURE DATE LITERNATE RANSPORTER NO. 2 DDRESS PHONE RANSPORTER NO. 2 DDRESS PHONE RANSPORTER SIGNATURE DATE RANSPORTER SIGNATURE DATE RANSPORTER SIGNATURE DATE	nited States Environmental Protection Agency. his is to certify that the above-named materials are properly classified, described, packaged.	tential value of any substances on , will be in accordance with proc , marked, labeled and are in prop	intained in such material adures approved by the per condition for training the generator:	als furnished for d e Oregon Departn portation accordin	isposal, except as se nent of Environment ing to the applicable	eparately a tal Quality regulation
RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DDRESS PHONE IGNATURE LITERNATE RANSPORTER NO. 1 DDRESS RANSPORTER SIGNATURE LTERNATE RANSPORTER NO. 2 DDRESS PHONE DATE LTERNATE RANSPORTER NO. 2 DDRESS PHONE DATE LTERNATE RANSPORTER NO. 2 DDRESS PHONE DATE DATE DATE RANSPORTER SIGNATURE DATE RANSPORTER SIGNATURE DATE RANSPORTER SIGNATURE DATE	nited States Environmental Protection Agency ris is to certify that the above-named materials are properly classified, described, packaged S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and	rential value of any substances co , will be in accordance with proc , marked, labeled and are in proj dated by the authorized agent of the	intained in such material adures approved by the per condition for transphe generator:	als furnished for d e Oregon Departn portation accordin	isposal, except as se nent of Environment ing to the applicable	eparately is tal Quality regulation
REATMENT FACILITY OR OLLECTION SITE ID. NO. DDRESS PHONE IGNATURE DATE LITERNATE RANSPORTER NO. 1 ID. NO. DDRESS PHONE RANSPORTER SIGNATURE DATE LITERNATE RANSPORTER NO. 2 ID. NO. DDRESS PHONE RANSPORTER NO. 2 ID. NO. DDRESS PHONE RANSPORTER SIGNATURE DATE RANSPORTER SIGNATURE DATE RANSPORTER SIGNATURE DATE RANSPORTER SIGNATURE DATE	nited States Environmental Protection Agency his is to certify that the above-named materials are properly classified, described, packaged S.Department of Transportation and the U.S. Environmental Protection Agency. Signed and SENERATOR SIGNATURE	rential value of any substances or , will be in accordance with proc , marked, labeled and are in proj dated by the authorized agent of to	intained in such materi adures approved by the per condition for transf he generator:	als furnished for de Oregon Departs portation according	isposal, except as senent of Environment of Environment ing to the applicable 5. October	eparately a tal Quality regulation
OLLECTION SITE ID. NO. DDRESS PHONE IGNATURE DATE LTERNATE RANSPORTER NO. 1 ID. NO. DDRESS PHONE RANSPORTER SIGNATURE DATE LTERNATE RANSPORTER NO. 2 ID. NO. DDRESS PHONE RANSPORTER NO. 2 ID. NO. DDRESS PHONE RANSPORTER SIGNATURE DATE RANSPORTER SIGNATURE DATE RANSPORTER SIGNATURE DATE	inted States Enveronmental Protection Agency is to carrify that the above-named materials are properly classified, described, packaged S.Department of Transportation and the U.S. Environmental Protection Agency. Signed and ENERATOR SIGNATURE RANSPORTER	rential value of any substances or , will be in accordance with proc , merked, labeled and are in proj dated by the authorized agent of to	intained in such material adures approved by the per condition for trained the generator:	als furnished for de 0 regon Departs portation according DATE 1 ID. NO	imposal, except as senent of Environment by to the applicable 5 Gotobor	eparately (tal Quality regulation
IGNATURE	inited States Environmental Protection Agency his is to certify that the above-named materiels are properly classified, described, packaged S.Department of Transportation and the U.S. Environmental Protection Agency. Signed and SENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE	rential value of any substances co, will be in accordance with proc. , marked, labeled and are in projected by the authorized agent of the substance of the su	intained in such material edures approved by the per condition for training the generator:	portation according DATE 1 D. NOPHONE	isposal, except as senent of Environment by to the applicable 5. Gotobor	eparately (
ITERNATE RANSPORTER NO. 1 ID. NO	in id States Environmental Protection Agency life is to carrify that the above-named materiels are properly classified, described, packaged S.Department of Transportation and the U.S. Environmental Protection Agency. Signed and SENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR	rential value of any substances co , will be in accordance with proc , merked, lebeled and are in prog dated by the authorized agent of t	intained in such materi adures approved by the per condition for trained he generator:	portation according DATE	isposal, except as senent of Environment of Environment ag to the applicable	eparately (
ID. NO	inited States Environmental Protection Agency his is to certify that the above-named materials are properly classified, described, packaged S.Depertment of Transportation and the U.S. Environmental Protection Agency. Signed and SENERATOR SIGNATURE RANSPORTER RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE	rential value of any substances or, will be in accordance with proc. I, merked, labeled and are in prog. dated by the authorized agent of the substance of the	intained in such material adures approved by the per condition for training the generator:	portation according DATE 1. ID. NO	isposal, except as senent of Environment by to the applicable 5 Gotobor	eparately 4 tal Quality regulation
RANSPORTER SIGNATURE	inted States Environmental Protection Agency is in to carrify that the above-named materiels are properly classified, described, packaged S.Department of Transportation and the U.S. Environmental Protection Agency. Signed and SENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DDRESS DDRESS	rential value of any substances co, will be in accordance with proc. I, marked, labeled and are in projected by the authorized agent of the substance of the s	intained in such material edures approved by the per condition for training the generator:	portation according DATE 1 D. NO PHONE ID. NO PHONE PHONE PHONE PHONE	isposal, except as senent of Environment by to the applicable 5 Gotobor	eparately a
TERNATE RANSPORTER NO. 2ID. NO DDRESSPHONE RANSPORTER SIGNATUREDATE	inted States Environmental Protection Agency is is to certify that the above-named materials are properly classified, described, packaged S.Department of Transportation and the U.S. Environmental Protection Agency. Signed and ENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DDRESS LIGNATURE LTERNATE	rential value of any substances co, will be in accordance with proc. I, marked, labeled and are in progressed by the authorized agent of the substance of the	intained in such material adures approved by the per condition for training the generator:	portation according to the DATE	isposal, except as senent of Environment by to the applicable 5 Gotobor	eparately a
RANSPORTER NO. 2ID. NO DDRESSPHONE RANSPORTER SIGNATUREDATE	inted States Environmental Protection Agency is is to certify that the above-named materiels are properly classified, described, packaged S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and ENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DDRESS LIGNATURE LTERNATE RANSPORTER NO. 1	rential value of any substances co, will be in accordance with proc. I, marked, labeled and are in progressed by the authorized agent of the substance of the	intained in such material educes approved by the per condition for training the generator:	portation according to the DATE 1. ID. NO	isposal, except as senent of Environment by to the applicable Sociober	eparately a
RANSPORTER SIGNATUREDATE	inted States Enveronmental Protection Agency is is to certify that the above-named materiels are properly classified, described, packaged S.Department of Transportation and the U.S. Environmental Protection Agency. Signed and SENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DDRESS LIGNATURE LTERNATE RANSPORTER NO. 1 DDRESS RANSPORTER NO. 1 DDRESS RANSPORTER SIGNATURE	rential value of any substances co, will be in accordance with proc. I, marked, labeled and are in prog. deted by the authorized agent of the substance of th	intained in such material educes approved by the per condition for training the generator:	portation according to the DATE	isposal, except as senent of Environment by to the applicable 5. Gotobor	eparately a
	inted States Environmental Protection Agency is is to certify that the above-named materiels are properly classified, described, packaged S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and ENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DDRESS IGNATURE LTERNATE RANSPORTER NO. 1 DDRESS RANSPORTER NO. 1 DDRESS RANSPORTER SIGNATURE CONTRACTOR OF THE CONTRACTOR OF TH	rential value of any substances co, will be in accordance with proc. I, marked, labeled and are in prog. dated by the authorized agent of the substance of th	intained in such material educes approved by the per condition for training the generator:	photography of the office of the original portation according to t	isposal, except as senent of Environment ing to the applicable 5. Gotobor	eparately a
LTERNATE FACILITYID. NO	inted States Enveronmental Protection Agency is to carrify that the above-named materiels are properly classified, described, packaged S.Department of Transportation and the U.S. Environmental Protection Agency. Signed and SENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DDRESS IGNATURE LTERNATE RANSPORTER NO. 1 DDRESS RANSPORTER SIGNATURE LTERNATE RANSPORTER NO. 2	rential value of any substances co, will be in accordance with proc. I, marked, labeled and are in prog. deted by the authorized agent of the substance of th	intained in such material educes approved by the per condition for trained the generator:	photography of the office of the original portation according to t	isposal, except as senent of Environment by to the applicable Cotober	eparately a
	INTER STATE RANSPORTER IGNATURE IGNATURE IGNATURE IGNATURE IGNATURE IGNATURE IGNATURE IGNATURE RANSPORTER SIGNATURE IGNATURE ILTERNATE RANSPORTER NO. 1 IGNATURE	rential value of any substances co, will be in accordance with proc. I marked, labeled and are in prograted by the authorized agent of the substance of the su	intained in such material educes approved by the per condition for training the generator:	photography of the office of the original portation according to t	isposal, except as senent of Environment by to the applicable 5. Gotobor	eparately at the Country of the Coun
	INTERIOR STATES Environmental Protection Agency is is to carrify that the above-named materials are properly classified, described, packaged S.Department of Transportation and the U.S. Environmental Protection Agency. Signed and SENERATOR SIGNATURE RANSPORTER ADDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DDRESS IGNATURE LTERNATE RANSPORTER SIGNATURE LTERNATE RANSPORTER SIGNATURE LTERNATE RANSPORTER SIGNATURE LTERNATE RANSPORTER SIGNATURE LTERNATE RANSPORTER NO. 2 DDRESS RANSPORTER SIGNATURE LTERNATE FACILITY DDRESS LTERNATE FACILITY	rential value of any substances co, will be in accordance with proc. I, marked, labeled and are in programed by the authorized agent of the substance of the s	intained in such material educes approved by the per condition for transphe generator:	photography of the office of the original portation according to t	isposal, except as senent of Environment ing to the applicable 5 Gotobor	eparately tal Quality regulatio

OLIAD

DEPTH

Manifest 24368

Chemical	Formulation	Hazard Class	IO#	EPA#	RQ=	Comment,s	Net Weight	Gross Weight
C G A 38140	50W						0.2	0.4
Carbofuran	10%G		UN2757			Poison B	3.0	30.0
Chlorothalonil	75W						1.5	2.0
Copper hydroxide	54W		UN2775			Poison B	5.0	11.0
Cyhexatin	50W						0.8	1.5
Dimethoate	25W	EHW		P044			0.3	1.0
Dinocap	4E						4.0	13.3
ЕТМТ	30W						0.6	2.0
Fenaminosulf	35W						. 2.3	6.5
Isazophos	10%G						0.5	5.0
Maleic hydrazide	3E	DW		U148			3.0	12.3
Phorate	10%G	ЕНИ		P094			1.0	10.5
Phosmet	50W						1.9	3.8
Progargite	30M		N2765		10	ORM·E	2.4	8.0
Stirofos	75W						4.1	5.5
Zinc-Maneb	W08						$\frac{6.4}{37.0}$	8.0 120.8

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.



D. NO. ORD OR 945 2353 ARLINGTON (503) 454-2777

BILL OF LADING NO.

GENERATOR Yakima Agric. Res. Lab., USDA/ARS		ID. N	O. WAD 12	051 3957	
ADDRESS 3706 W Nob Hill Blvd, Yakima, WA 98	902		PHON	E_(509)5	75 59
WASTE DESCRIPTION	CON	TAINER	GAL.	LB.	FT,
	QUANTITY	TYPE			
See List Attached To This Form	91	Drum	55	228.1	7.3
OOT SHIPPING NAME_Insecticide-Liquid, NOS	DOT HAZARD	CLASS Pos	tson B		
PHYSICAL STATE (circle) SOLID LIQUID					
MAJOR HAZARD (circle) TOXIC CORROSIVE IGNI					
	THE NATIONAL ANADA, TRA ASSISTANCE reterns, Inc., immediately c	AL RESPONS INSPORT CA Upon acceptance of su	SE CENTEI ANADA (6 sch meterielle by Ch	R, U.S.CO 13) 996-6	AST 666
AND/OR CONTACT, IN THE UNITED STATES, GUARD (800) 424-8802, OR CONTACT, IN CON	THE NATIONAL CANADA, TRA ASSISTANCE reterns, Inc., immediately continue of any substances continue of any substances continue on accordance with proceed, lebeled and are in project.	AL RESPONS INSPORT CA Lupon acceptance of su ontained in such mater adures approved by the oper condition for trans	SE CENTES ANADA (6 sich meterials by Ch elst furnished for di se Oregon Departir	R, U.S.CO/ 13) 996-6 iem-Security Syste sposal, except as a ent of Environmen	AST 666 ms, Inc., eparately tal Quality
AND/OR CONTACT, IN THE UNITED STATES, GUARD (800) 424-8802, OR CONTACT, IN CON	THE NATIONAL CANADA, TRA ASSISTANCE reterns, Inc., immediately continue of any substances continue of any substances continue on accordance with proceed, lebeled and are in project.	AL RESPONS INSPORT CA Lupon acceptance of su ontained in such mater adures approved by the	SE CENTEI ANADA (6 ich meteriels by Ch els furnished for di se Oregon Departir sportation accordin	R, U.S.CO/ 13) 996-6 iem-Security Syste sposal, except as a ent of Environmen	AST 666 ms, Inc., eparately tal Quality
AND/OR CONTACT, IN THE UNITED STATES, GUARD (800) 424-8802, OR CONTACT, IN CON	THE NATIONAL CANADA, TRA ASSISTANCE reterns, Inc., immediately continue of any substances continue of any substances continue on accordance with proceed, lebeled and are in project.	AL RESPONS INSPORT CA Lupon acceptance of su ontained in such mater adures approved by the	SE CENTEI ANADA (6 ich meteriels by Ch els furnished for di se Oregon Departir sportation accordin	R, U.S.CO/ 13) 996-6: sem-Security Syste aposal, except as a ent of Environmen g to the applicable	AST 666 ms, Inc., eperately tal Quality regulation
AND/OR CONTACT, IN THE UNITED STATES, GUARD (800) 424-8802, OR CONTACT, IN CON	THE NATIONAL CANADA, TRACASSISTANCE retems, Inc., immediately considered of any substances on the inaccordance with process of the authorized agent of the considered of the authorized agent of the considered of	AL RESPONS INSPORT CA Lupon acceptance of au ontained in such matter adures approved by the per condition for trans the generator:	SE CENTEI ANADA (6 Ich materials by Chest furnished for di the Oregon Departm portation accordin DATE ID. NO	R, U.S.CO/ 13) 996-6: em-Security Syste apostal, except as a ent of Environmen g to the applicable	AST 666 ms, Inc., eperately tal Quality regulation
AND/OR CONTACT, IN THE UNITED STATES, GUARD (800) 424-8802, OR CONTACT, IN CON	THE NATIONAL CANADA, TRA ASSISTANCE reterns, Inc., immediately civalue of any substances coe in accordance with proceed, lebeled and are in prophy the authorized agent of the	AL RESPONS NSPORT CA upon acceptance of su ontained in such matter adures approved by the per condition for trans the generator:	SE CENTES ANADA (6 sch materials by Ct este furnished for di se Oregon Departm sportation accordin DATE ID. NOPHONE	R, U.S.CO/ 13) 996-6: em-Security Syste aposal, except as a ent of Environmen g to the applicable	AST 666 ms, Inc., eparately, tal Quality regulation
AND/OR CONTACT, IN THE UNITED STATES, GUARD (800) 424-8802, OR CONTACT, IN OF FOR EMERGENCY (1990) 1990 1990 1990 1990 1990 1990 1990	THE NATIONAL CANADA, TRACASSISTANCE retems, Inc., immediately considered of any substances on the in accordance with process of all labeled and are in prophy the authorized agent of the considered a	AL RESPONS INSPORT Col. upon acceptance of au ontained in such matter adures approved by the per condition for trans the generator:	SE CENTEI ANADA (6 sch materials by Challe furnished for di se Oregon Departm sportation accordin DATE ID. NO PHONE DATE DATE	R, U.S.CO/ 13) 996-6: em-Security Syste spotal, except as a ent of Environmen g to the applicable	AST 666 ms. Inc., eperately tal Quality regulation
AND/OR CONTACT, IN THE UNITED STATES, GUARD (800) 424-8802, OR CONTACT, IN OFFICE OF EMERGENCY is to all materials furnished for disposal herein shall be deemed to be vested in Chem-Security Sherestor or Tensporter. The generator shall have no right to recovery nor any credit for the potential ring by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will inted States Environmental Protection Agency. Is is to certify their the above-named materials are properly classified, described, packaged, mark S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated ENERATOR SIGNATURE. RANSPORTER. DDRESS. RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE.	THE NATIONAL CANADA, TRACASISTANCE retems, Inc., immediately considered of any substances on the in accordance with process of the authorized agent of the considered of the authorized agent of the considered of	AL RESPONS INSPORT CA Lupon acceptance of au ontained in such matter adures approved by the per condition for trans the generator:	SE CENTEI ANADA (6 sch materials by Chest furnished for di se Oregon Departm sportation accordin DATEID. NOPHONEDATEID. NO	R, U.S.CO/ 13) 996-6: em-Security Syste aposal, except as a ent of Environmen g to the applicable	AST 666 ms. Inc., eparately, tal Quality regulation
AND/OR CONTACT, IN THE UNITED STATES, GUARD (800) 424-8802, OR CONTACT, IN OF FOR EMERGENCY is to all materials furnished for disposal herein shall be deemed to be vested in Chem-Security Sheristor or transporter. The generator shall have no right to recovery nor any credit for the potential ring by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will interest States Environmental Protection Agency. In is to carrify their the above-named materials are properly classified, described, peckaged, mark St. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated ENERATOR SIGNATURE. RANSPORTER. DDRESS. RANSPORTER SIGNATURE REATMENT FACILITY OR DLLECTION SITE. DDRESS.	THE NATIONAL CANADA, TRACASISTANCE (STANCE) (STA	AL RESPONS NSPORT CA Lupon acceptance of su ontained in such matter adures approved by the per condition for trans the generator:	SE CENTEI ANADA (6 sch materials by Challe furnished for di se Oregon Departm portation accordin DATE ID. NO. PHONE DATE ID. NO. PHONE	R, U.S.CO/ 13) 996-6: em-Security Syste apostal, except as a ent of Environmen g to the applicable	AST 666 ms. Inc., eparately, tal Quality regulation
AND/OR CONTACT, IN THE UNITED STATES, GUARD (800) 424-8802, OR CONTACT, IN OFFICE OF EMERGENCY (100) 100 to all materials furnished for disposal herein shall be deemed to be vested in Chem-Security Sheristor or transporter. The generator shall have no right to recovery nor any credit for the potential ring by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will it red States Environmental Protection Agency. It is to carthy their the above-named materials are properly classified, described, peckaged, mark Schepertment of Transportation and the U.S. Environmental Protection Agency. Signed and dated ENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DDRESS GNATURE TERNATE	THE NATIONAL CANADA, TRACASISTANCE (STANCE) (STA	AL RESPONS NSPORT CA Lupon acceptance of su ontained in such matter adures approved by the per condition for trans the generator:	SE CENTEI ANADA (6 sch materials by Challe furnished for di se Oregon Departm DATE ID. NO. PHONE DATE ID. NO. PHONE DATE	R, U.S.CO/13) 996-6: em-Security Syste aposts, except as a ent of Environmen g to the applicable	AST 666 ms. Inc., eparately, tal Quality regulation
AND/OR CONTACT, IN THE UNITED STATES, GUARD (800) 424-8802, OR CONTACT, IN OF FOR EMERGENCY is to all materials furnished for disposal herein shall be deemed to be vested in Chem-Security Sherator or transporter. The generator shall have no right to recovery nor any credit for the potential ting by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will it red States Environmental Protection Agency. Is is to carrily their the above-named materials are properly classified, described, peckaged, mark 5. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated ENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR DLLECTION SITE DDRESS GNATURE TERNATE	THE NATIONAL CANADA, TRACASISTANCE retems, Inc., immediately considered of any substances coes in accordance with proceed, lebeled and are in prophy the authorized agent of t	AL RESPONS NSPORT CA upon acceptance of su ontained in such matter adures approved by the per condition for trans the generator:	SE CENTEI ANADA (6 sch materials by Chest furnished for dise Oregon Departm portation accordin DATE ID. NO. PHONE DATE ID. NO. PHONE DATE ID. NO. PHONE DATE ID. NO.	R, U.S.CO/13) 996-6: em-Security Syste aposts, except as a sent of Environmen g to the applicable	AST 666 ms. Inc., eparately in tal Quality regulation
AND/OR CONTACT, IN THE UNITED STATES, GUARD (800) 424-8802, OR CONTACT, IN OFFICE OF THE METAL PROPERTY OF THE	THE NATIONAL CANADA, TRACASISTANCE Interns, Inc., immediately civalue of any substances coe in accordance with proceed, lebeled and are in prophy the authorized agent of the company of the authorized agent of the company of the authorized agent of the company o	AL RESPONS NSPORT CA upon acceptance of su ontained in such matter adures approved by the per condition for trans the generator:	SE CENTEI ANADA (6 sch materials by Cr este furnished for di se Oregon Departm portation accordin DATE ID. NO. PHONE DATE ID. NO. PHONE DATE ID. NO. PHONE DATE DATE	R, U.S.CO/13) 996-6: em-Security Syste aposal, except as a sent of Environmen g to the applicable Commons	AST 666
AND/OR CONTACT, IN THE UNITED STATES, GUARD (800) 424-8802, OR CONTACT, IN OF FOR EMERGENCY (1900) 1900 1900 1900 1900 1900 1900 1900	THE NATIONAL CANADA, TRACASISTANCE Interns, Inc., immediately civalue of any substances coe in accordance with proceed, lebeled and are in prophy the authorized agent of the	AL RESPONS NSPORT CA upon acceptance of su ontained in such matter adures approved by the per condition for trans the generator:	SE CENTEI ANADA (6 sch materials by Cr este furnished for di se Oregon Departm portation accordin DATE ID. NO. PHONE DATE ID. NO. PHONE DATE ID. NO. PHONE DATE	R, U.S.CO/13) 996-6: em-Security Syste aposal, except as a sent of Environmen g to the applicable Comments Comments	AST 666 ms. Inc., apparately a special control of the control of t
AND/OR CONTACT, IN THE UNITED STATES, GUARD (800) 424-8802, OR CONTACT, IN OFFICE FOR EMERGENCY IN CONTACT, IN CONTROL OF THE PROPERTY OF THE	THE NATIONAL CANADA, TRACASSISTANCE retems, Inc., immediately considered of any substances one in accordance with proceed, lebeled and are in prophy the authorized agent of t	AL RESPONS INSPORT Col. upon acceptance of suportained in such matter adures approved by the per condition for trans the generator:	SE CENTEI ANADA (6 ch materials by Create furnished for di the Oregon Departm portation accordin	R, U.S.CO/ 13) 996-6/ em-Security Syste spotal, except as a ent of Environment of the applicable of th	AST 666 ms. Inc., eparately it tal Quality regulation
AND/OR CONTACT, IN THE UNITED STATES, GUARD (800) 424-8802, OR CONTACT, IN C FOR EMERGENCY the to all manages furnished for disposal herein shall be deemed to be vested in Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will sit to certify their the above-nemed materials are properly classified, described, peckaged, mark 5. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated SENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DDRESS IGNATURE LTERNATE RANSPORTER NO. 1 DDRESS RANSPORTER SIGNATURE LTERNATE RANSPORTER NO. 2 DDRESS DDRESS DDRESS DDRESS LTERNATE RANSPORTER NO. 2	THE NATIONAL CANADA, TRACASISTANCE retems, Inc., immediately considered of any substances on the in accordance with process of a lebeled and are in prophy the authorized agent of the authorized agen	AL RESPONS INSPORT Col. upon acceptance of suportained in such matter adures approved by the per condition for trans the generator:	SE CENTEI ANADA (6 sch materials by Create furnished for di se Oregon Departm portation accordin DATE ID. NO. PHONE DATE	R, U.S.CO/13) 996-6: em-Security Syste aposal, except as a ent of Environment of the applicable of the	AST 666 ms. Inc., eparately a tal Quality regulation
AND/OR CONTACT, IN THE UNITED STATES, GUARD (800) 424-8802, OR CONTACT, IN OF FOR EMERGENCY The potential materials furnished for disposal herein shall be deemed to be vested in Chem-Security Systems, Inc., Disposal operations by Chem-Security Systems, Inc., Disposal operations by Chem-Security Systems, Inc., will inted States Environmental Protection Agency. In it is to certify that the above-nemed materials are properly classified, described, peckaged, marks, Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated SENERATOR SIGNATURE. RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DDRESS IGNATURE LTERNATE RANSPORTER NO. 1 DDRESS RANSPORTER SIGNATURE LTERNATE RANSPORTER NO. 2	THE NATIONAL CANADA, TRACASISTANCE retems, Inc., immediately considered of any substances on the in accordance with process of the authorized agent of	AL RESPONS INSPORT Colinary upon acceptance of subnitained in such matter adures approved by the per condition for trans the generator:	SE CENTEI ANADA (6 sch materials by Create furnished for di see Oregon Departm portation accordin DATE ID. NO. PHONE DATE	R, U.S.CO/13) 996-6: em-Security Syste aposal, except as a ent of Environment of the applicable of the	AST 666 ms, Inc., eparately tal Quality regulation

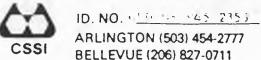
_ WEIGHT TICKET NO. _____

__ GROSS _

Manifest 24369

Chemical	Formulation	Hazard Class	ID#	EPA#	RQ=	Commen:s	Net Weight	Gross Weight
Cycloate	6E						.34.0	75.0
Demeton	2 E						2.0	11.3
Desmidipham	1.3E						€.5	47.0
Methamidophos	4WM						4.0	13.3
Mevinphos	4E		N2783		1	Poison B	12.0	39.6
Oxydemeton-Methyl	2E						2.0	11.3
Perthane	4E						4.0	13.3
Phosphamidon	8E						8.0	17.3
							72.5	228.1

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.



PORTLAND (503) 223-1912

-		A
6	X	٨
7	SS	ST

CSSI

VANCOUVER, B.C. (604) 688-7612 GENERATOR Yokims Agric. Res. Lab., USIA // PS ID. NO. WWD 12 051 3957 PHONE (509) 575 5877 ADDRESS 3706 W Nob Hill Blv., Yakima, WA 38902 WASTE DESCRIPTION CONTAINER GAL. LB. FT, QUANTITY TYPE See List Attached To This Form 01 55 163.7 Drum 7.30 DOT SHIPPING NAMEInsecticide-Dry&Lindid. NOS DOT HAZARD CLASS Poison B PHYSICAL STATE (circle) SOLID LIQUID SLUDGE OTHER _____ MAJOR HAZARD (circle) TOXIC CORROSIVE IGNITABLE REACTIVE OTHER______ SPECIAL INSTRUCTIONS (HANDLING/EMERGENCY) IN THE EVENT OF A SPILL, CONTACT EITHER OF THE CHEM-SECURITY SYSTEMS OFFICES AND/OR CONTACT, IN THE UNITED STATES, THE NATIONAL RESPONSE CENTER, U.S.COAST GUARD (800) 424-8802, OR CONTACT, IN CANADA, TRANSPORT CANADA (613) 996-6666 FOR EMERGENCY ASSISTANCE. Title to all materials furnished for disposal heren shall be deemed to be vested in Chem-Security Systems, Inc., immediately upon acceptance of such materials by Chem-Security Systems, Inc. from the generator or transporter. The generator shall have no right to recovery nor any credit for the potential value of any substances contained in such materials furnished for disposal, except as separately agreed in writing by Chem-Security Systems, Inc., Disposal operations by Chem-Security Systems, Inc., will be in accordance with procedures approved by the Oregon Department of Environmental Quality and the United States Environmental Protection Agency. This is to certify that the above-named materials are properly classified, described, packaged, marked, labeled and are in proper condition for transportation according to the applicable regulations of the U.S. Environmental Protection Agency. Signed and dated by the authorized agent of the generator: DATE 19 CHARLET GENERATOR SIGNATURE _____ TRANSPORTER_____ ID. NO. _____ PHONE _____ ADDRESS___ DATE _____ TRANSPORTER SIGNATURE 3 TREATMENT FACILITY OR COLLECTION SITE_____ ID. NO. PHONE __ ADDRESS_ SIGNATURE _____ _DATE _____ ALTERNATE ___ID. NO. __ TRANSPORTER NO. 1 _____PHONE _____ TRANSPORTER SIGNATURE ______DATE _____ ALTERNATE __PHONE ADDRESS_ TRANSPORTER SIGNATURE ______DATE _ _____ID. NO. __ ALTERNATE FACILITY ADDRESS_

BILL OF LADING NO. ______WEIGHT TICKET NO. _____ GROSS _____

DISPOSAL AREA ______ SECTION _____ QUAD ____ DEPTH ____ TARE _____

Manifest 35499

Chemical	Formulation	Hazard Class	ID#	EPA#	RQ=	Comments	Net Weight	Gross Weight
Bay SRA 12869	6EC				_		7.83	10.50
C G A 73102	10%G						0.15	1.50
cocs	100%						0.79	0.79
DPX 5444	2EC						0.25	1.00
Ethoprop	6EC						2.25	3.00
Ethoprop	10%G						1.15	11.50
Fensulfothion	6E						0.98	1.29
Fensulfothion	15%G						4.42	29.46
Fonofos	4 E	•					5.87	11.75
Isofenphos	6SC			•			0.75	1.00
Isofenphos	20%G						2.90	14.50
Lindane	20%	EHW		U129			0.40	2.00
M 9070	10%G						0.009	0.009
M 9525	10%G						0.009	0.009
Methamidophos	4EC						6.25	12.50
Methyl bromide	100%	EHW	UN 1062	U029		Poison ()	1.00	1.00
Naled	8E		NA 2783		1	ORH-E	31.75	31.75

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

Manifest 35499 (continued)

Chemical	Formulation	Hazard Class	ID#	EPA#	RQ=	Comments	Net Weight	Class Weight
NC 6897	10%G						0.57	5.70
RE 27644	10%G						0.27	2.75
SN 72129	5 % G						0.03	0.68
SN 72129	50WP						0.14	0.28
TEPP	40%	EHW	NA2783	P111	100	Poison B	5.20	13.00
UC 54063	50W						0.88	1.75
UC 54229	100\$						1.00	1.00
UC 67546	75W						3.75	5.00
							78.648	163.718

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

- CHEMICAL TRANSPORTATION MANIFEST

24370

CSSI

ID. NO. <u>ORD 08 945 2353</u> ARLINGTON (503) 454-2777 BELLEVUE (206) 827-0711

BILL OF LADING NO.

PORTLAND (503) 223-1912 VANCOUVER, B.C. (604) 688-7612

GENERATOR Yakima Agric.Res. Lab., USDA/ARS								
ADDRESS 3706 W Nob Hill Blvd, Yakima, WA 989	202	· · · · · · · · · · · · · · · · · · ·	PHON	PHONE (509) 575 58				
WASTE DESCRIPTION	CON	CONTAINER		LB.	FT ₁			
	QUANTITY	TYPE	-					
See List Attached To This Form	01	Drum	55	110.9	7.36			
DOT SHIPPING NAME Insecticide-Dry&Liquid PHYSICAL STATE (circle) (SOLID) LIQUID	-	CLASS Pot						
MAJOR HAZARD (circle) TOXIC CORROSIVE IGNIT SPECIAL INSTRUCTIONS (HANDLING/EMERGENCY)	ABLE, REAC	TIVE OTH	ER					
ISDARD BUILDAZESBUZ UR L'EINTACH IN ('	ANADA TRA		ANADA 16	R, U.S.CO				
inerator or transporter. The generator shell have no right to recovery nor any credit for the potential string by Chem-Security Systems, Inc., Disposal operations by Chem-Security Systems, Inc., will be nited States Environmental Protection Agency.	ASSISTANCE stems, Inc., immediately traine of any substances or in accordance with process in accordance with process.	NSPORT CA , upon acceptance of su intended in such matter adures approved by th	ich materials by Ch ials furnished for di se Oregon Departm	13) 996-6 nem-Security Syste sposal, except as a lent of Environmen	666 ms, Inc., fr eparately ag tal Quality (
FOR EMERGENCY the to-all matterness furnished for disposal herein shall be deemed to be vested in Chem-Security Systemators to transporter. The generator shall have no right to recovery nor any credit for the potential virting by Chem-Security Systems, Inc., will be nited States Emeronmental Protection Agency hits is to certify that the above-named materials are properly classified, described, packaged, marks S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated by	ASSISTANCE stems, Inc., immediately value of any substances co in accordance with proceed, labeled and are in project the authorized agent of the suthorized agent of the substances.	NSPORT C/ , poor acceptance of su interned in such meternedures approved by the per condition for trans- he generator:	ich materials by Chials furnished for di le Oregon Departm sportation accordin	13) 996-6 nem-Security Syste sposel, except as se ent of Environmen g to the applicable	ms, Inc., fr eparately ag tal Quality in regulations			
FOR EMERGENCY the to all materness furnished for disposal herein shall be deemed to be vested in Chem-Security Systems for the potential virting by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will be nited States Emeronmental Protection Agency his is to certify that the above-named materials are properly classified, described, packaged, marks S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated b	ASSISTANCE stems, Inc., immediately value of any substances or in accordance with proceed, labeled and are in progress the authorized agent of the suthorized agent of the substances.	NSPORT C/ upon acceptance of su intained in such mater edures approved by the per condition for trans- the generator:	ch materiels by Chels furnished for die Poregon Department of the Poregon Department of the Poregon DATE 13	13) 996-6 nem-Security Syste sposel, except as a sent of Environmen g to the applicable	ms, Inc., fr eparately ag- tal Quality or regulations			
FOR EMERGENCY the to all materness furnished for disposal herein shall be deemed to be vested in Chem-Security Systems to retransporter. The generator shall have no right to recovery nor any cradit for the potential virting by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will be nitted States Environmental Protection Agency his is to certify that the above-named materials are properly classified, described, packaged, marks S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated by ENERATOR SIGNATURE RANSPORTER RANSPORTER	ASSISTANCE stems, Inc., immediately value of any substances or in accordance with proceed, labeled and are in progress the authorized agent of the suthorized agent of the substances.	NSPORT C/ upon acceptance of su intained in such mater edures approved by the per condition for trans- the generator:	ch materiels by Chels furnished for die Poregon Department of the Poregon Department of the Poregon DATE 15	13) 996-6 nem-Security Syste sposel, except as a sent of Environmen g to the applicable	ms, Inc., fr eparately ag tel Quality in regulations			
FOR EMERGENCY the to all materness furnished for disposal herein shall be deemed to be vested in Chem-Security Sys- inerator or transporter. The generator shall have no right to recovery nor any cradit for the potential virting by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will be nited States Environmental Protection Agency his is to certify that the above-named materials are properly classified, described, packaged, marks S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated b SENERATOR SIGNATURE RANSPORTER DDRESS DDRESS	ASSISTANCE stems, Inc., immediately usual of any substances of a in accordance with proceed, labeled and are in program by the authorized agent of the support of the suppo	NSPORT C/, ipon acceptance of suintained in such material edures approved by the per condition for transhe generator:	ch materiels by Chels furnished for die Oregon Departmon portation according DATE	13) 996-6 nem-Security Syste sposal, except as a ent of Environmen g to the applicable	666 ms, Inc., h specially as tel Quality in			
FOR EMERGENCY the to all materness furnished for disposal herein shall be deemed to be vested in Chem-Security Systems are not or transporter. The generator shall have no right to recovery nor any credit for the potential virting by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will be inted States Environmental Protection Agency his is to certify that the above-named materials are properly classified, described, packaged, marks S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated by ENERATOR SIGNATURE RANSPORTER ADDRESS RANSPORTER SIGNATURE	ASSISTANCE stems, Inc., immediately usual of any substances of a in accordance with proceed, labeled and are in program by the authorized agent of the support of the suppo	NSPORT C/, ipon acceptance of suintained in such material edures approved by the per condition for transhe generator:	ch materiels by Chels furnished for die Oregon Departmon portation according DATE	13) 996-6 nem-Security Syste sposel, except as a sent of Environmen g to the applicable	666 ms, Inc., fi speciately at tal Quality regulations			
FOR EMERGENCY the to all materials furnished for disposal herein shall be deemed to be vested in Chem-Security Systems to transporter. The generator shall have no right to recovery nor any credit for the potential virting by Chem-Security Systems, Inc., Disposal operations by Chem-Security Systems, Inc., will be inted States Environmental Protection Agency his is to certify that the above-named materials are properly classified, described, peckaged, marks S.Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated by ENERATOR SIGNATURE RANSPORTER RANSPORTER SIGNATURE REATMENT FACILITY OR	ASSISTANCE stems, Inc., immediately traine of any substances or an accordance with proceed, labeled and are in procy the authorized agent of the substances.	NSPORT C/ pon acceptance of su intained in such material edures approved by the per condition for transite generator:	ch materiels by Chells furnished for die Poregon Department of the Por	13) 996-6 nem-Security Syste sposal, except as a ent of Environmen g to the applicable	666 me, Inc., h specially as tel Quality regulations			
FOR EMERGENCY the to all materials furnished for disposal herein shall be deemed to be vested in Chem-Security Systems, inc. Disposal operation in pith to recovery nor any credit for the potential virting by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will be inted States Environmental Protection Agency is is to certify that the above-named materials are properly classified, described, packaged, marks S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated by ENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE	ASSISTANCE stems, Inc., immediately usual of any substances of an substances of an accordance with proceed, labeled and are in progy the authorized agent of the substances.	NSPORT C/ ipon acceptance of su intained in such mater edures approved by the per condition for trans he generator:	ch materiels by Cheels furnished for die Poregon Department of the Poregon Department of the Poregon Department of the Poregon DATE	13) 996-6 nem-Security Syste sposel, except as seent of Environmen g to the applicable	666 me, Inc., h eperatory as tel Quality regulations			
FOR EMERGENCY the to all meternets furnished for disposal herein shall be deemed to be vested in Chem-Security Systems, Inc. Disposal operation in pight to recovery nor any cradit for the potential virting by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will be nitted States Environmental Protection Agency his is to certify that the above-named materials are properly classified, described, packaged, marks S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated by SENERATOR SIGNATURE RANSPORTER RANSPORTER REATMENT FACILITY OR OLLECTION SITE DDRESS DDRESS DDRESS DDRESS DDRESS DDRESS DDRESS DDRESS	ASSISTANCE stems, Inc., immediately useful of any substances of an substances of an accordance with proceed, labeled and are in proyy the authorized agent of the substances of the substances.	NSPORT C/ ipon acceptance of su intained in such material edures approved by the per condition for trans he generator:	ch materiels by Chels furnished for die Oregon Departmon according DATE 15 LD. NOPHONE	13) 996-6 nem-Security Syste sposel, except as a sent of Environmen g to the applicable	666 me, Inc., fr eperatory ag tel Quality in regulations			
FOR EMERGENCY The to all materials furnished for disposal herein shall be deemed to be visited in Chem-Security Systems, Inc. Disposal operation in pith to recovery nor any credit for the potential virting by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will be inted States Environmental Protection Agency is is to certify that the above-named materials are properly classified, described, packaged, marks S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated by ENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DORESS IGNATURE LTERNATE	ASSISTANCE stems, Inc., immediately unable of any substances of an substances of an accordance with proceed, labeled and are in proyy the authorized agent of the substances.	NSPORT C/, spon acceptance of suntanead in such material edures approved by the per condition for transhe generator:	ch materiels by Chells furnished for die Pregon Department of the Prego	13) 996-6 nem-Security Syste sposel, except as a sent of Environmen g to the applicable	ms, Inc., fr sparately ag tal Quality of regulations			
FOR EMERGENCY The to all materials furnished for disposal herein shall be deemed to be visited in Chem-Security Systems, Inc. Disposal operation in pith to recovery nor any cradit for the potential virting by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will be inted States Environmental Protection Agency is is to certify that the above-named materials are properly classified, described, packaged, marks S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated by ENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DORESS IGNATURE LTERNATE RANSPORTER NO. 1	ASSISTANCE stems, Inc., immediately unable of any substances of an substances of an accordance with proceed, labeled and are in proyy the authorized agent of the substances.	NSPORT C/, spon acceptance of suntanead in such material edures approved by the per condition for transhe generator:	ch materies by Chest furnished for die Preparties of Chest furnished for die Preparties of Chest furnished for die Preparties of Chest furnished for die Proportation according DATE	13) 996-6 nem-Security Syste sposel, except as a ent of Environmen g to the applicable	666 ms, Inc., fr speciately ag tal Quality in regulations			
FOR EMERGENCY the to all metamats furnished for disposal herein shall be deemed to be vested in Chem-Security Systems, Inc. Disposal operation in pith to recovery nor any credit for the potential virting by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will be inted States Environmental Protection Agency ins is to certify that the above-named materials are properly classified, described, packaged, marks S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated by ENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DDRESS IGNATURE LTERNATE RANSPORTER NO. 1 DDRESS LTERNATE LTERNATE LTERNATE RANSPORTER NO. 1	ASSISTANCE stems, Inc., immediately unable of any substances of a in accordance with proceed, labeled and are in proy the authorized agent of the substances	NSPORT C/ ipon acceptance of su intained in such material edures approved by the per condition for trans he generator:	ch materiels by Chells furnished for die Prepartiel or die Prepart	13) 996-6 hem-Security Syste sposal, except as a hent of Environmen g to the applicable	666 ms, Inc., fr sparately ag tal Quality of regulations			
FOR EMERGENCY The to all materies furnished for disposal herein shall be deemed to be vested in Chem-Security Systems, Inc., Disposal operation of transporter. The generator shall have no right to recovery nor any credit for the potential virting by Chem-Security Systems, Inc., Disposal operations by Chem-Security Systems, Inc., will be inted States Environmental Protection Agency its is to certify that the above-named materials are properly classified, described, packaged, marks S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated by ENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DDRESS IGNATURE LTERNATE RANSPORTER NO. 1 DDRESS RANSPORTER SIGNATURE LTERNATE RANSPORTER SIGNATURE LTERNATE RANSPORTER SIGNATURE LTERNATE RANSPORTER SIGNATURE LTERNATE	ASSISTANCE stems, Inc., immediately unable of any substances of a in accordance with proceed, labeled and are in proy the authorized agent of the substances of the authorized agent of the authorized	NSPORT C/ ipon acceptance of su intained in such mater edures approved by the per condition for trans he generator:	ch materiels by Chells furnished for dise Oregon Department of the Property of	13) 996-6 nem-Security Syste sposel, except as a sent of Environmen g to the applicable CINESE	ms, Inc., fr sparately ag tal Quality is regulations			
FOR EMERGENCY The to all materials furnished for disposal herein shall be deemed to be vested in Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc. Disposal operations by Chem-Security Systems, Inc., will be inted States Environmental Protection Agency is is to certify that the above-named materials are properly classified, described, packaged, marks S Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated by ENERATOR SIGNATURE RANSPORTER DDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DDRESS IGNATURE LTERNATE RANSPORTER NO. 1 DDRESS RANSPORTER SIGNATURE LTERNATE RANSPORTER NO. 2	ASSISTANCE stems, Inc., immediately usual of any substances of an substances of an accordance with proceed, labeled and are in progy the authorized agent of the substances of	NSPORT C/ ipon acceptance of su intained in such mater edures approved by the per condition for trans he generator:	ch materiels by Cheels furnished for die Oregon Department of the Port of the	13) 996-6 nem-Security Syste sposel, except as a sent of Environmen g to the applicable CICERS	ms, Inc., fr sparately ag tal Quality is regulations			
FOR EMERGENCY the to all materies furnished for disposal herein shall be deemed to be vested in Chem-Security Systems are not or transporter. The generator shall have no right to recovery nor any credit for the potential virting by Chem-Security Systems, Inc., Disposal operations by Chem-Security Systems, Inc., will be nited States Environmental Protection Agency is is to certify that the above-named materials are properly classified, described, peckaged, marks S. Department of Transportation and the U.S. Environmental Protection Agency. Signed and dated by SENERATOR SIGNATURE RANSPORTER ADDRESS RANSPORTER SIGNATURE REATMENT FACILITY OR OLLECTION SITE DORESS IGNATURE LTERNATE RANSPORTER NO. 1 DDRESS RANSPORTER SIGNATURE LTERNATE RANSPORTER SIGNATURE LTERNATE RANSPORTER SIGNATURE LTERNATE RANSPORTER SIGNATURE LTERNATE RANSPORTER NO. 2 DDRESS DDRESS	ASSISTANCE stems, Inc., immediately useful of any substances of an accordance with proceed, labeled and are in proy the authorized agent of the author	NSPORT C/ ipon acceptance of su intained in such material edures approved by the per condition for trans he generator:	ch materiels by Cheels furnished for die Oregon Departmon according DATE	13) 996-6 nem-Security Syste sposel, except as a ent of Environmen g to the applicable CCOSSS	666 ms, Inc., fr sperately ag tal Quality of			
	ASSISTANCE stems, Inc., immediately useful of any substances of a in accordance with proceed, labeled and are in proy the authorized agent of the substances of the authorized agent agent of the authorized agent of the authorized agent agent agent	NSPORT C/ ipon acceptance of su intanaed in such material edures approved by the per condition for trans he generator:	ch materiels by Cheels furnished for die Oregon Departmon according to the Property of the Pro	13) 996-6 nem-Security Syste sposel, except as a sent of Environmen g to the applicable CONSE	666 me, Inc., fr eperately ag tel Quality in regulations			

_ WEIGHT TICKET NO. .

Manifest 24370

Chemical	Formulation	Hazard Class	ID#	EPA#	RQ=	Commen	Net Weight	Gross Weight
Antiozonant	88						0.22	0.22
Bay SIR 8514	25WP						1.12	4.48
Benzylamine	100%						0.33	0.33
Butyl lithium in hexane	64%						1.48	2.31
Butyraldehyde	100%		UN1129			Flammable	6.61	6.61
Butyryl chloride	100%						5.51	5.51
Chlorpyrifos	15%G		NA2783		1	ORM-A	6.68	44.53
Diflubenzuron	25W						0.50	2.00
3,5-Dinitrobenzyl- chloride	100%		UN1577			Poison B	0.28	0.28
ENT 2543	100%						0.31	0.31
Fensulfothion	6E						0.45	0.61
Fenvalerate	2.4EC						0.60	2.00
Fonofos	20 % G	·					2.00	10.00
2,4-Hexadienoic acid	100%		UN2458			Flammable	0.88	0.88
Hexanoic acid	100%	i	NA1760			Corros ive	2.20	2.20
			0.0					

This is to certify that the above named materials are properly classified, descr bed, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

Manifest 24370

Chemical	Formulation	Hazard Class	ID#	EPA#	RQ=	Comments	Net Weight	Gross Weight
Antiozonant	88						0.22	0.22
Bay SIR 8514	25WP						1.12	4.48
Benzylamine	100%						0.33	0.33
Butyl lithium in hexane	64%						1.48	2.31
Butyraldehyde	100%		UN1129			Flammable	6.61	6.61
Butyryl chloride	100%						5.51	5.51
Chlorpyrifos	15%G		NA2783		1	ORM- A	6.63	44.53
Diflubenzuron	25₩						0.50	2.00
3,5-Dinitrobenzyl- chloride	100%		UN1577			Poison B	0.28	0.28
ENT 2543	100%						0.31	0.31
Fensulfothion	6E						0.45	0.61
Fenvalerate	2.4EC						0.60	2.00
Fonofos	20%G						2.00	10.00
2,4-Hexadienoic acid	100%		UN2458			Flamable	0.88	0.88
Hexanoic acid	100%		NA1760			Corresive	2.20	2.20

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

APPENDIX A-3 MAZARDOUS WASTE HANIFESTS FOR 1964 YAKIMA AGRICULTURAL RESEARCH LABORATORY

				HOUTE OND	EMMELEASE NO	
TOP THIS CAR OR TRUCK AT			CARTRUCK CONTAINE	A MARKED C	APACITY DATE	DATE B/L
TOP THIS CAN ON THOCK AT		IMPORTANT	ORDERED FURNISH		FURNISHED FURNISHED	ISSUED
22		Issuing office is to retain one				11/27/64
THUCK OR CONTAINER INITIAL	S KIND	memorandum copy and send one to the fiscal office	"Length-cube	Il estra servic	rmation in case of carbac fruit bac ces are ordered see	shorers or a
.5 .0			FROM		ections No 2 on reverse	
			USDA-AF	25		
efferved by the transportation compared on reverse hereof, the properticer and condition (contents and estimation by the said company and re-good order and condition to said of	y hereinafter d value unkno connecting lin	escribed, in apparent good wn), to be forwarded to	FULL NAME OF SHIP USDA-ARS 3706 W. Noh		WA ./Yakima, WA 9	8902
C'-SIGNEE (Name, address and ZIP of	ode)		MARKS		7 (6 (100)	0302
Chem-Security Systems						•
Arlington, Oregon 93	1912		1			
ESTINATION (Name, address and ZIP	code of install	ation)	BILL CHARGES TO	Dept.agency, bur	eaulottice, mailing addres	
Chem-Security Systems 7 miles beyond Arling			5846486	400 AAAAA	USDA-National P. O. Box 6000 New Orleans, L	^
A Route shipment when advantaged			50157050	31 50%		
EAL NUMBERS		RIER'S USE ONLY — WAYBIL REIGHT BILL NO.				
			Contractor will return fice from which recei		eled bills of lading to the	Government of-
FACKAGES DESCRIPTION OF	ARTICLES (II	se carrier's classification of	NUMBERS OF		1	
		se a clear nontechnical descrip	2.04.050	WEIGHTS"		
7 DRUM Pesticides		Ba Ba Ba Ba	rrel#1 00228 rrel#2 00229 rrel#3 01505 rrel#4 01506 rrel#5 01507 rrel#6 01508 rrel#7 01509	246 1b 240 1b 235 1b 210 1b 242 1b 226 1b 450 1b	8135	20
Generator's HA9120		D NO.:				
* 1			TARIFF OR	SPECIAL RATE A	UTHORITIES (CL. TL or Ve	ol. only)
If this shipment fully I	oads the car o	r truck used check [] YES				
FFE ER FURNISHED SERVICE AT OF	1	7005C03	FOR USE OF COVERA	CT OF FURCHASE ORDE	ER NO OR OTHER AUTHOR	DATED
		S- <u>(825623</u>	FOR POINT NAMED	10-0540-5-1	UK 6	
= CKUF TRAP Initials of CAR shipper's agent					LIA	
TRAP Initials of Shipper's agent AME OF TANSPORTATION			ISSUITE OFFICER INAM	and fill 12. Tra	147 x	DATE
TRAP Initials of shipper's agent AME OF AMERICAN TO THE DEPTH OF SHIPMENT AND THE DEPTH OF SHIPM	rbor Fre	Ight Lines		and hills to		
TRAP Initials of shipper's agent AND SPOPTATION CARANY	nitial carriers ag	Typic Carica ent by signature below ed the Original fail of Lading	RESERVES OFFICED INAM	1/1	Perchasing Agen	11/27/9
TRAP Initials of Shipper's agent AME OF PANSPORTATION DIMPANY	nitial carriers ag		ISSUITE OFFICE INAMO	<i>ए) प्रशंत</i> हस्य	Perchasing Agen	11,127/S
TRAP Initials of shipper's agent AND SPOPTATION CARANY	nitial carriers ag	ed the Ongira Ibili of Lading	ISSUITE OFFICE INAMO	<i>ए) प्रशंत</i> हस्य	Porchasing Agen	11,127/S
TRAP Initials of Shipper's agent AME OF PEDERY OF SHIPMENT OF SHIP	initial carrier's ag ortifies he receive	ed the Ongira Ibili of Lading	ISSUITE OFFICE INAMO	<i>ए) प्रशंत</i> हस्य	d Waldea 40.	11/27/S t
FOKUP TRAP Initials of Shipper's agent AME OF PECEPT OF SHIPMENT TO THE OF TH	initial carriers agentifies he received	ed the Ongira Ibili of Lading	USDA-ARS	ey eyxineeyi		11,/27/S t

U.S. GUVERNIVIENT DILL OF LADING

1 GENUMBER				RCHASE)505-0005	
	RECEIVING OFFICE NO	CONTRACT		С	ORDER DATE	5 SF. 37	UNIT CODE	FUND CODE	ORDER NUMBER	20
or]	0540	Onen	Market_		1128884	5		T 5	40-0540-5-06	69
Che Sta	(Seller)	Systems, Inc,		b	USDA Agric 3706	ultu W. N	iral Re lob Hil IA 989	searc	h Service	
13 ACT CODE		14 DESCRIPTION			15 BUDGET OBJECT	16 ACC. LINE	17 QUANTITY	UNIT ISSUE	18 UNIT PRICE	20 AMOUNT
	posal of haz	ardous waste	- pesti	cides	2312	1	7	BL	90.00	630
				07.404						
Pri	ce Quote per	Chem Securi	ties II/i	27/84.						
rre	ight convert	ed to GBL 7,8	325,623.						:	
rre	ight convert	ed to GBL 7,8	32 5,623.							
*2:57	ight convert		COUNT TERMS	et 30 c	lays		0		Sub-Total	630
Des	tination		SCOUNT TERMS	et 30 c	lays		O)-	Sub-Total	
Desi	tination 28/84 CLASSIFICATION	22 DIS	scount terms Ne	et 30 c	lays		TIMATED)-	Sub-Total	630
Dest	tination 28/84 CLASSIFICATION	22 DIS 24 SH	scount terms Ne IP via Surt	et 30 c			TIMATED EIGHT -()_	TOTAL 30	630
Desi	tination 28/84 CLASSIFICATION	22 DIS 24 SH	scount terms Ne IP via Surt	face		FRI	TIMATED EIGHT —(1	TOTAL DISTRIBUTION 50% 50%	630

A!	UNIFORM HAZARDOUS WASTE MANIFEST	MAD12051		1228	2. Pos		ation in the	shaded or ederal law	eos 15		
	Generator's Name and Mailing Address Yakima Agric Res Lab USDA	A/ARS			A. Sta	ite Manifest Docu	ment Num	ber			
	3706 W Nob Hill Blvd, Yak Generator's Phone (509) 575-5877	cime, WA 985	902		B. Sta	te Generator's ID					
1 -	Transporter 1 Company Name		6 US EPA ID Number		C. Sta	ite Transporter's I	D		-		
					D. Tra	insporter's Phone					
7	Transporter 2 Company Name		8. US EPA ID Number		E. Sta	te Transporter's I	D				
L						nsporter's Phone					
19	Designated Facility Name and Site Address Chem-Security Systems, Inc.		10 US EPA ID Number		G. Sto	ste Facility's ID		-			
	tar Route					H. Facility's Phone 503-454-2643					
1 -				1 12 Con	1				-		
'	1 US DOT Description (Including Proper Snipp) -	ng Name, Hazard Cl	ess, and IU Number	No.	Туре	Total Quantity	Unit Wt Voi	Woste I	No.		
0	See attached sheet	Contains Po	oison B, EHW, and		556		LB				
1	X P039, and P094 34.8	1b Net wei	ght	1.	Dru		246				
5 b											
V											
)											
_				1	· ·	1 7 1					
d											
. 1	Ada tonal Descriptions for Materials Listed Aba. b. c. d.	.oov e			K. Har	odling Codes for '	Wastes List	ed Above			
-	Scet a Handling Instructions and Additional a. D 5034 8 b. c. d.	Information Wast	e Profile Sheet Number(s)	1						
1,	5 GENERATOR'S CERTIFICATION Thereby dec in 22 ng name and are classified, packed, in according to applicable international and nat	narked, and labeled	l, and are in all respects in prop								
_	Presed Typed Name		Signature				/:0	nih Day	Year		
	,,		Signotore					- -	73,		
1	Or. 4. 7. Not whith I Transporter 1 Acknowledgement of Receipt o	of Materials			-		-	Date			
_	Pred/Typed Name		Signature	110	1	,	//0	nth Day	Year		
3	Dick Wetsch		1)ich	02	to	-	1	1 28	34		
18	Transporter 2 Acknowledgement of Receipt o	f Materials						Date			
-	Printed/Typed Name		Signature				Mo	nth Day	Year		
15	2. D Isrepancy Indication Space				-						
20). Facility Owner or Operator: Certification of re	ceipt of hazardous r	naterials covered by this manifes	t except as	noted in	Item 19.		Date			
	Printed/Typed Name		Signature				Mo	nth Day	Feor		
								1			

HEARSECURING SELENSAINC

OREGON ACCIDENT TO THE CONTROL OF TH

MASIE MARKINEST	20513957	220	of	1 not re	quired by F	e shaded areas ederal law	
3 Generator's Name and Mailing Address Yakima Agric Res Lab USDA/ARS			A. Sta	te Manifest Doo	ument Nun	nber	
3706 W Nob Hill Blvd, Yakima, WA	98902		A . C	te Generator's I			
4 Generator's Phone (509 575 5877	. ,0,02		6 3101	re Generator s l	D		
5 Transporter 1 Company Name	6 US EPA ID Number		C. Sta	te Transporter's	ID		
5 We for a Company work				nsporter's Phon			
7 Transporter 2 Company Name	8 US EPA ID Number		-	te Transporter's			
			F Tran	nsporter's Phone	's Phone		
9 Designated Facility Name and Site Address	10. US EPA ID Number		G. Sta	ite Facility's ID			
Chem-Security Systems, Inc.							
Star Route				ility's Phone			
Arlangton, Occason 97817	ORD 089 452 35	_	50	3-454-2643			
11 US DOT Description Including Proper Shipping Name, Ha	rard Class and ID Number)	12 Cons	raineis ;	13. Lotoi	Unit	EPA/L	
		No	Type	Quantity	Wt/Vol	Waste No.	
See attacked sheet Contain	ne Poison R and Import	1	556 Dru		240 1b		
See attached sheetContai	TOTAL DES G DOGIOT EM.		Diu		10		
1) In her welkur							
D							
е.							
		1 4					
d			1				
			1				
J. Additional Descriptions for Materials Listed Above			K Hon	dling Codes for	Wastes Lis	ited Above	
α.							
L							
b.							
b. c. d.							
c. d.	Wasta Profile Chast Number(s)	1					
 c. d. 15 See: a Mandling Instructions and Additional Information 	Waste Profile Sheet Number(s)						
c. d.	Waste Profile Sheet Number(s)						
c. d. 15 Special Mandling Instructions and Additional Information a. DS0348	Waste Profile Sheet Number(s)						
c. d. 15 Special Mandling Instructions and Additional Information a: DS0348 b.	Waste Profile Sheet Number(s)						
c. d. 15 Special Mandling Instructions and Additional Information a. DSD348 b. c. d. 16 GENERATOR'S CERTIFICATION: Thereby declare that the	contents of this consignment are fully and c	occurately (
c. d. 15 See: a Mandling Instructions and Additional Information a. DSD348 b. c. d. 16 GENERATOR'S CERTIFICATION, I hereby declare that the sripping name and are classified, packed, marked, and	contents of this consignment are fully and contents of this consignment are fully and contents of the contents	occurately (
c. d. 15 Special Mandling Instructions and Additional Information a. DSD348 b. c. d. 16 GENERATOR'S CERTIFICATION. Thereby declare that the	contents of this consignment are fully and contents of this consignment are fully and contents of the contents	occurately (Dore	
c. d. 15 Special Mandling Instructions and Additional Information a. DSD348 b. c. d. 16 GENERATOR'S CERTIFICATION, I hereby declare that the snaph name and are class fied, packed, marked, and according to applicable international and national governing.	contents of this consignment are fully and contents of this consignment are fully and contents of the contents	occurately (оу	Dord Oor 'ec	
c. d. 15 Sect a Mandling Instructions and Additional Information a. DS0348 b. c. d. 16 GENERATOR'S CERTIFICATION, Thereby declare that the sripping name and are class fied, packed, marked, and according to applicable international and national government of the L. Dolphin	contents of this consignment are fully and clabeled, and are in all respects in prope smental regulations.	occurately (оу		
c. d. 15 Special Mandling Instructions and Additional Information a. DSD348 b. c. d. 16 GENERATOR'S CERTIFICATION, I hereby declare that the snaph name and are class fied, packed, marked, and according to applicable international and national governing to applicable international and national governing to according to applicable international and national governing to according to applicable international and national governing to the L. Dolphin. 17 Transporter 1 Acknowledgement of Receipt of Materials	contents of this consignment are fully and of labeled, and are in all respects in proper mental regulations. Signature	occurately (7.A.	Onth Day 'ed	
c. d. 15 Sect a Mandling Instructions and Additional Information a. DS0348 b. c. d. 16 GENERATOR'S CERTIFICATION, Thereby declare that the sripping name and are class fied, packed, marked, and according to applicable international and national government of the L. Dolphin	contents of this consignment are fully and clabeled, and are in all respects in prope smental regulations.	occurately (7.A.	Date onth Day "ed	
c. d. 15 Special Mandling Instructions and Additional Information a. DSD348 b. c. d. 16 GENERATOR'S CERTIFICATION, Thereby declare that the snaping name and are class fed, packed, marked, and according to applicable international and national government Typed Name 21. R. L. Dolphin 17. Transporter 1 Acknowledgement of Receipt of Materials Printed Typed Name Dick Yetsch	contents of this consignment are fully and of labeled, and are in all respects in proper mental regulations. Signature	occurately (7.A.	Date onth Day *** onth Day *** 1 25 34	
c. d. 15 Special mandling Instructions and Additional Information a. DS0348 b. c. d. 16 GENERATOR'S CERTIFICATION. Thereby declare that the snaping name and are class fied, packed, marked, and according to applicable international and national governing. Princed Typed Name 21. R. L. DOIPHIN 17. Transporter 1 Acknowledgement of Receipt of Materials Princed Typed Name Dick Vetsch 18. Transporter 2 Acknowledgement of Receipt of Materials	contents of this consignment are fully and contacted and are in all respects in proper mental regulations. Signature	occurately (- A	Date onth Day recond 25 34	
c. d. 15 Special Mandling Instructions and Additional Information a. DSD348 b. c. d. 16 GENERATOR'S CERTIFICATION, Thereby declare that the snaping name and are class fed, packed, marked, and according to applicable international and national government Typed Name 21. R. L. Dolphin 17. Transporter 1 Acknowledgement of Receipt of Materials Printed Typed Name Dick Yetsch	contents of this consignment are fully and of labeled, and are in all respects in proper mental regulations. Signature	occurately (- A	Date onth Day *** onth Day *** 1 25 34	
c. d. 15 Special mandling Instructions and Additional Information a. DS0348 b. c. d. 16 GENERATOR'S CERTIFICATION, thereby declare that the smaller name and are class field, packed, marked, and according to applicable international and national government Typed Name 21. L. DOIPHIN 17. Transporter 1 Acknowledgement of Receipt of Materials Printed Typed Name Dick Vetsch 18. Transporter 2 Acknowledgement of Receipt of Materials Printed Typed Name	contents of this consignment are fully and contacted and are in all respects in proper mental regulations. Signature	occurately (- A	Date onth Day recond 25 34	
c. d. 15 Special mandling Instructions and Additional Information a. DS0348 b. c. d. 16 GENERATOR'S CERTIFICATION, thereby declare that the smaller name and are class field, packed, marked, and according to applicable international and national government Typed Name 21. L. DOIPHIN 17. Transporter 1 Acknowledgement of Receipt of Materials Printed Typed Name Dick Vetsch 18. Transporter 2 Acknowledgement of Receipt of Materials Printed Typed Name	contents of this consignment are fully and contacted and are in all respects in proper mental regulations. Signature	occurately (- A	Date onth Day recond 25 34	
c. d. 15 Special mandling Instructions and Additional Information a. DSD348 b. c. d. 16 GENERATOR'S CERTIFICATION: Thereby declare that the snaphy name and are class field, packed, marked, and actording to applicable international and national governing and Typed Name 21. R. L. DOIPHIN 17. Transporter 1 Acknowledgement of Receipt of Materials Printed Typed Name Dick Vetsch 18. Transporter 2 Acknowledgement of Receipt of Materials Printed Typed Name 19. Dicrepancy Indication Space	Contents of this consignment are fully and of labeled and are in all respects in proper mental regulations. Signature	occurately or condition	lor tran	nsport by highw	- A	Date onth Day recond 25 34	
c. d. 15 Special mandling Instructions and Additional Information a. DS0348 b. c. d. 16 GENERATOR'S CERTIFICATION, I hereby declare that the snaphy name and are class fied, packed, marked, and according to applicable international and national government of Typed Name 21. Roll Dolphin 17. Transporter 1 Acknowledgement of Receipt of Materials Printed Typed Name Dick Vetsch 18. Transporter 2 Acknowledgement of Receipt of Materials	Contents of this consignment are fully and of labeled and are in all respects in proper mental regulations. Signature	occurately or condition	lor tran	nsport by highw	- A	Date onth Day recond 25 34	

=	LIANTECODA A LIATADDONIC 13 Gard								
			505	2. Pag		formation to requir	ed by fe	shoded as deral low	1805 -
, 3	Generator's Name and Mailing Address	0 1		A. Stat	te Manifest	Docume	ent Numi	Der	
Ī	Yakima Agric Res Leb USDA/ARS	08002							
	3706 W Nob Hill Blwd, Yakima WA	78902		B. Stat	e Generate	or's ID			
	Generator's Phone (509) 575 5877								
5	Transporter 1 Company Name	6. US EPA ID Number			te Transpor				
_			1 3	-	nsporter's P				
. /	Transporter 2 Company Name	8. US EPA ID Number			e Transport				
9	Designated Facility Name and Site Address	10 US EPA ID Number			te Facility's				
1		TO OS CITA IO NOMOGI		0 3.0	r demiy s				
	Chem-Security Systems, Inc.			H. Foci	ility's Phone	·			
	Aritination, Oregon 97812	ORD 089 452 353	1		3-454-26				
11	US DOT Description (Including Proper Snipping Ivame, in	I was and IO Number	12 Con	giners	1.3		1.4	tra/	
•	03 201 Description including Proper Shipping Name, IV	aza. 3 Crass. and ra rearrager	No	Туре	Total Quanti		Unit	Woste	No
	Constant about	7-4 P. P.B.: PO(0		1	400				
	X P050,P066, P045, UN2757, and 37/6 lb Not weight	ns roison b, Ens., 1969, NA.2783	P 1	55G Drum		-	235 LB		
b									
_			-	<u> </u>					
c									
							i		
	·					•			
đ				. 1					
		1		' 1					
	Add tonal Descriptions for Materials Listed Above a.			K Han	dling Code	s for Wo	astes Liste	ed Above	
	a. b. c. d.			K Han	dling Code	s for Wo	astes Liste	ed Above	
15	b. c. d. Special mandling instructions and Additional Information 2.550348 b.	Waste Profile Sheet Number(s)		K Han	dling Code	s for Wa	astes Listo	ed Above	
15	b. c. d. Special mandling instructions and Additional Information 250348 b. c. d. GENERATOR'S CERTIFICATION: I hereby declare that the shipping name and are classified, packed, marked, and acceptancy to applicable international and national governance.	e contents of this consignment are fully and a diabeled, and are in all respects in proper	ccurately condition	describec	d above by (proper	postes Listo	2016	
15	b. c. d. Sast a mandling instructions and Additional Information 350348 b. c. d. GENERATOR'S CERTIFICATION: I hereby declare that the snipping name and are classified, packed, marked, and	e contents of this consignment are fully and a distributed, and are in all respects in proper remental regulations.	ccurately cond-tion	describec	d above by (proper	ostes Lista	2016	***
15	b. c. d. Special mandling Instructions and Additional Information DS0348 b. c. d. GENERATOR'S CERTIFICATION: I hereby declare that the shipping name and are classified, packed, marked, and according to applicable international and national government.	e contents of this consignment are fully and a diabeled, and are in all respects in proper remental regulations	ccurately cond-fian	describec	d above by (proper		22:4 Do,	***
15	Special mandling instructions and Additional Information GENERATOR'S CERTIFICATION: I hereby declare that the straining name and are classified, packed, marked, and action may be applicable international and national government of applicable international and national government of applicable international and national government of accept at Materials	e contents of this consignment are fully and a disculed, and are in all respects in proper inmental regulations. Signature	ccurately cond-tion	describec	d above by (proper	· · · · · · · · · · · · · · · · · · ·	Dore Do, Care	
15	b. c. d. Special mandling Instructions and Additional Information DS0348 b. c. d. GENERATOR'S CERTIFICATION: I hereby declare that the shipping name and are classified, packed, marked, and according to applicable international and national government.	e contents of this consignment are fully and a distributed, and are in all respects in proper remental regulations.	ccurately condition	describec	d above by (proper		Dote Do,	
15	Seet a mording instructions and Additional Information 2.250348 b. C. d. GENERATOR'S CERTIFICATION: I hereby declare that the shape of some and are classified, packed, marked, and actors right of applicable international and national government of receipt of Materials Printed Typed Name Dick Vetsch	e contents of this consignment are fully and a disculed, and are in all respects in proper inmental regulations. Signature	ccurately condition	describec	d above by (proper	· · · · · · · · · · · · · · · · · · ·	2016 5016 5016 5016 5016	
15	See: a mandling Instructions and Additional Information 5.50348 b. GENERATOR'S CERTIFICATION: I hereby declare that the shading name and are classified, packed, marked, and according to applicable international and national government of a processor of the packed o	e contents of this consignment are fully and a distributed, and are in all respects in proper remental regulations. Signature	ccurately condition	describec	d above by (proper	//or	Core Core Core Core Core	100
15	Seet a mording instructions and Additional Information 2.250348 b. C. d. GENERATOR'S CERTIFICATION: I hereby declare that the shape of some and are classified, packed, marked, and actors right of applicable international and national government of receipt of Materials Printed Typed Name Dick Vetsch	e contents of this consignment are fully and a disculed, and are in all respects in proper inmental regulations. Signature	ccurately condition	describec	d above by (proper	,	2014 Do, 11h Du, 128 Dore	16
15	See: a mandling Instructions and Additional Information 5.50348 b. GENERATOR'S CERTIFICATION: I hereby declare that the shading name and are classified, packed, marked, and according to applicable international and national government of a processor of the packed o	e contents of this consignment are fully and a distributed, and are in all respects in proper remental regulations. Signature	ccurately cond-tar	describec	d above by (proper	//or	Core Core Core Core Core	16.
15	Section mandling Instructions and Additional Information GENERATOR'S CERTIFICATION: I hereby declare that the shape of parameter and are classified, packed, marked, and according to applicable international and national government of applicable international and national government of a receipt of Materials. Printed Typed Name Dick Vetsch Transporter 2 Acknowledgement of Receipt of Materials. Printed Typed Name Discrepancy Indication Space	e contents of this consignment are fully and a distributed, and are in all respects in proper remental regulations. Signature	/ de	described for tran	d above by his	proper	//or	Core Core Core Core Core	100
15	Special mondling instructions and Additional Information GENERATOR'S CERTIFICATION: Thereby declare that the straining name and are classified, packed, marked, and action mondling processing to applicable international and national government of a policy process of the second mondling in the second mondlin	e contents of this consignment are fully and a distributed, and are in all respects in proper remental regulations. Signature	/ de	described for tran	d above by his	proper	//or	Core Tore Tore Tore Tore Tore Tore Tore T	'es'
15	Section mandling Instructions and Additional Information GENERATOR'S CERTIFICATION: I hereby declare that the shape of parameter and are classified, packed, marked, and according to applicable international and national government of applicable international and national government of a receipt of Materials. Printed Typed Name Dick Vetsch Transporter 2 Acknowledgement of Receipt of Materials. Printed Typed Name Discrepancy Indication Space	e contents of this consignment are fully and a distributed, and are in all respects in proper remental regulations. Signature	/ de	described for tran	d above by his	proper	//or	Date	Year Year Year

WASTE MANIFEST MA 120513957	7	ሰሞጃ [™] ሽ	2 Page		ured by Fe	shaded are ederal law
3 Generator's Name and Mailing Address		77-0-	A State	Manifest Docu	ment Num	ber
Yakima Agric Res Lab USDA/ARS						
3706 W Nob Hill Blvd, Yakima, WA 98902	2		8 State	Generator's ID)	
4 Generator's Phone 1509 575-5877						
5 Transporter 1 Company Name 6	US EPA ID Num	ber	C State	Transporter's I	D	
January Company				sporter's Phone		
7 Transparer 2 Company Name 8	US EPA ID Num		-	Transporter's II		
/ Tronsponer 2 Company Hume	000	OC.		porter's Phone		
9 Designated Equility Name and Site Address 10	US EPA ID Num			Focility s ID		
	03 (7 4 10 110	Der	3.0	rocking 1.0		
Chem-Security Systems, Inc.			tt Sacil	ty's Phone		
Star Route Arlington, Oregon 97812	ORD 089 452	353		-454-2643		
			_i		1 1	
11 US DOT Description including Proper Shipping Name Hazard Class. 4	end ID Number	1	ntoiners	13 Total	Unit	EPA/
		No.	Type	Quantity	Wt Vol	Waste N
O V Con control of the Control of th			i		1	
X See attached sheetContains Poiso	A B, EHW, UUO	1	55G		210	
and P094 43.2 1b Het weight		-1	Dism		LB	
Ь						
				1000		
\$ -			i			
C.			1		}	
					-	
d.						
			1 1			
					1 1	
J. Add tranai Descriptions for Materials Listed Above a. b.			K Hond	ling Codes for	Wastes List	ed Above
a.			K Hond	iing Codes for	Wastes List	ed Above
a. b. c. d. 'S Special Mandling Instruction, and Additional Information Waste P. a. D50348 b.	rofile Sheet Numb	er(s)	K Hond	ling Codes for	Wastes List	ed Above
a. b. c. d. 'S Special Mondling Instruction; and Additional Information Waste P a. D50348 b. c.	rofile Sheet Numb	er(s)	K Hond	ling Codes for	Wastes List	ed Above
a. b. c. d. 15 Special Handling Instruction; and Additional Information Waste P a. D50348 b. c. d.						ed Above
a. b. c. d. 'S Special Mandling Instruction; and Additional Information Waste Pa. D50348 b. c.	this consignment are fully nd are in all respects in j	and accurate	y described	obove by prope	er	Dote
a. b. c. d. 'S Special Mandling Instruction, and Additional Information Waste P. a. D50348 b. c. d. 16 GENERATOR'S CERTIFICATION: Thereby declare that the contents of an aping name and are classified, packed, marked, and obeled, an	this consignment are fully nd are in all respects in j	and accurate	y described	obove by prope	e () ;	
a. b. c. d. 15 Special Mandling Instruction, and Additional Information. Waste P. a. D50348 b. c. d. 16 GENERATOR'S CERTIFICATION: Thereby declare that the contents of snipping name and are class field, packed, marked, and labeled, an according to applicable international and national governmental reg. Printed Typed Name	this consignment are fully nd are in all respects in j ulations	and accurate	y described	obove by prope	e () ;	Dore Soin Day
a. b. c. d. 'S Special Handling Instruction; and Additional Information. Waste P. a. D50348 b. c. d. GENERATOR'S CERTIFICATION: Thereby declare that the contents of snaping name and are class field, packed, marked, and obeled, on according to applicable international and national governmental reg. Printed Typed Name Dr. R. E. Dolphia	this consignment are fully nd are in all respects in j ulations	and accurate	y described	obove by prope	er :- c	Dore Soin Day
a. b. c. d. 15 Special Mandling Instruction, and Additional Information. Waste P. a. D50348 b. c. d. 16 GENERATOR'S CERTIFICATION: Thereby declare that the contents of snipping name and are class field packed, marked, and abeled, an according to applicable international and national governmental reg. Printed Typed Name BT R B DOIDE F. 17 Transporter 1 Acknowledgement of Receipt of Materials	this consignment are fully and are in all respects in pulations Signature - Address	and accurate	y described	obove by prope	er 5;	Dore Day
a. b. c. d. '5 Special Handling Instruction; and Additional Information Waste Pla. D50348 b. c. d. '6 GENERATOR'S CERTIFICATION: Thereby declare that the contents of snaping name and are classified, packed, marked, and abeled, an according to applicable international and national governmental reg. Printed Typed Name BT. E. Dolphia: '7 Transporter 1 Acknowledgement of Receipt of Materials Printed Typed Name	this consignment are fully nd are in all respects in j ulations	and accurate	y described	obove by prope	er 5;	Date Day Date Date
a. b. c. d. 'S Special Handling Instruction, and Additional Information. Waste P. a. D50348 b. c. d. '6 GENERATOR'S CERTIFICATION: Thereby declare that the contents of snaping name and are class fled, packed, marked, and abeled, an according to applicable international and national governmental reg. Printed Typed Name DT. E. D. DODGE: '7 Transparter 1 Acknowledgement of Receipt of Materials Printed Typed Name Dick Vetsch	this consignment are fully and are in all respects in pulations Signature - Address	and accurate	y described	obove by prope	// / / / / / / / / / / / / / / / / / /	Date Day Date Date
a. b. c. d. '5 Special Handling Instruction; and Additional Information Waste Plan D50348 b. c. d. '6 GENERATOR'S CERTIFICATION: Thereby declare that the contents of snaping name and are class fled, packed, marked, and abeled, an according to applicable international and national governmental reg. Printed Typed Name BT. F. E. Dolphin '7 Transporter 1 Acknowledgement of Receipt of Materials Printed Typed Name Dick Vetsch 18 Transporter 2 Acknowledgement of Receipt of Materials	this consignment are fully and are in all respects in pulations Signature Signature	and accurate	y described	obove by prope	e: ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;;	Date Day Date Date Date Date
a. b. c. d. 'S Special Handling Instruction, and Additional Information. Waste P. a. D50348 b. c. d. '6 GENERATOR'S CERTIFICATION: Thereby declare that the contents of snaping name and are class fled, packed, marked, and abeled, an according to applicable international and national governmental reg. Printed Typed Name DT. E. D. DODGE: '7 Transparter 1 Acknowledgement of Receipt of Materials Printed Typed Name Dick Vetsch	this consignment are fully and are in all respects in pulations Signature - Address	and accurate	y described	obove by prope	e: ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;;	Date Day Date Dath Day 1 28
a. b. c. d. 15 Special Mandling Instruction, and Additional Information. Waste Plain D50348 b. c. d. 16 GENERATOR'S CERTIFICATION: Thereby declare that the contents of snipping name and are class field, packed, marked, and abeled, an according to applicable international and national governmental reg. Printed Typed Name DT. R. D. Dolphia 17 Transporter 1 Acknowledgement of Receipt of Materials Printed Typed Name Dick Vetsch 18 Transporter 2 Acknowledgement of Receipt of Materials Printed Typed Name	this consignment are fully and are in all respects in pulations Signature Signature	and accurate	y described	obove by prope	e: ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;;	Dare Day Dare Dare Date Date
a. b. c. d. 15 Special Handling Instruction and Additional Information Waste P a. D50348 b. c. d. 16 GENERATOR'S CERTIFICATION: Thereby declare that the contents of snaping name and are class field, packed, marked, and abeled, an according to applicable international and national governmental reg. Printed Typed Name BT F Dolphin Transporter 1 Acknowledgement of Receipt of Materials Printed Typed Name Dick Vetsch Transporter 2 Acknowledgement of Receipt of Materials	this consignment are fully and are in all respects in pulations Signature Signature	and accurate	y described	obove by prope	e: ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;;	Dare Day Dare Day 1 28 Date
b. c. d. 15 Special Mandling Instruction Land Additional Information. Waste Plan D50348 b. c. d. 16 GENERATOR'S CERTIFICATION: Thereby declare that the contents of shipping name and are class field, packed, marked, and abeled, an according to applicable international and national governmental reg. Printed Typed Name UT. F. E. Dolphia 77 Transporter 1 Acknowledgement of Receipt of Materials Printed Typed Name Dick Vetsch 18 Transporter 2 Acknowledgement of Receipt of Materials Printed Typed Name	this consignment are fully and are in all respects in judations Signature Signature Signature Signature	and accurately proper condition	y described on for transi	obove by prope	e: ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;; ;;	Date Date Date Date
a. b. c. d. 15 Special Mandling Instruction; and Additional Information. Waste P. a. D50348 b. c. d. 16 GENERATOR'S CERTIFICATION: Thereby declare that the contents of snaping name and are class field, packed, marked, and labeled, on according to applicable international and national governmental reg. Printed Typed Name DT. F. E. Lolphin 17 Transporter 1 Acknowledgement of Receipt of Materials Printed Typed Name Dick Vetsch 18 Transporter 2 Acknowledgement of Receipt of Materials Printed Typed Name	this consignment are fully and are in all respects in judations Signature Signature Signature Signature	and accurately proper condition	y described on for transi	obove by prope	// // // // // // // // // // // // //	Dote Dote Date Date Date

WASTE MANIFEST	HAD120513957	เกิ	507	2 Page 1	not requ	red by fe	shoded are derailaw	
3 Generator's Name and Mailing Address			.001	A. State M	anifest Docum	nent Numb	er	
Yakima Agric Res Lab USI								
3706 W Nob Hill Blwd, Ye	-			8 State G	enerator's ID			
Generator's Phone (509 575-587)	7			1				
Transporter 1 Company Name	6	US EPA ID Number		C State Tr	ansporter's ID)		
		4000 1 00 000		D Transpo	rter's Phone			
7 Transporter 2 Company Name	8	US EPA ID Number			ansporter's ID			
	- 1	10-11 1 1 10 10 0	- 1 1	F Transpo				
P. Designated Facility Name and Site Address	10	US EPA ID Number		G State F	ocility's 10			
Chem-Security Systems, Inc.								
Star Route		ORD 089 452 35		H. Focility's	54-2643			
Arlington, Oregon 97817								
US DCT Description Including Proper Shippi	ng Name, Hazard Class, and ID	Numberi	, 12 Con	o-ners	Total	4	EFA/L	
•			No	ype	Quantity	W• 701	Waste N	
X See attached sheet 0	Contains Poison B.	ENW. POSO.		55G		242		
PO51, U122, U247, PO89				DTIM		LBI		
H2765 52.9 LB Net wei								
						1		
				1		i		
				1		-		
4			1			. 1		
				1 .		1 1		
a. b. c.	ove			į.	g Codes for W	osies tisie	d Above	
 b. c. d. 5 See: a Handling Instructions and Additional 		Sheet Number(s)		g codes for w		d Above	
b. c. d.		Sheet Number(s	.)		g codes for w		d Above	
b. c. d. 5 Special Handling Instructions and Additional a. D50348		Sheet Number(s)				d Above	
 b. c. d. 5 Special Handling Instructions and Additional a. D50348 b. 		Sheet Number(s	.)		, codes for w		d Above	
b. c. d. 5 Special Handling Instructions and Additional a. DS0348 b. c. d.	Information Waste Profile			!			d Above	
b. c. d. 5 Special Handling Instructions and Additional a. D50348 b. c. d. 6 GENERATOR'S CERTIFICATION: I hereby decimal representations and are classified, packed, in the content of the	Information Waste Profile clare that the contents of this contented, and abeled, and are	issignment are fully and in all respects in prop	accurately:	Described ob	ove by proper		d Above	
b. c. d. 5 Special Handling Instructions and Additional a. D50348 b. c. d. 6 GENERATOR'S CERTIFICATION: Thereby dec	Information Waste Profile clare that the contents of this contented, and abeled, and are	issignment are fully and in all respects in prop	accurately:	Described ob	ove by proper		a Above	
b. c. d. 5 Special Mondling Instructions and Additional a. D50348 b. c. d. 6 GENERATOR'S CERTIFICATION. Thereby determined by name and are classified, packed, in section by to applicable international and name	Information Waste Profile clare that the contents of this contacted, and abeled, and are trional governmental regulations	issignment are fully and in all respects in prop	accurately:	Described ob	ove by proper		Pore	****
b. c. d. 5 Special Handling Instructions and Additional a. DSO348 b. c. d. 6 GENERATOR'S CERTIFICATION. Thereby decir abing name and are classified, packed, in attaching to applicable international and national an	Information Waste Profile clare that the contents of this contacted, and abeled, and are trional governmental regulations	isignment are fully and in all respects in prop s	accurately:	Described ob	ove by proper		Pore	100
b. c. d. 5 Special Mondling Instructions and Additional a. DS0348 b. c. d. 6 GENERATOR'S CERTIFICATION: I hereby decimabing name and are classified, packed, in attaining to applicable international and national an	Information Waste Profile clare that the contents of this contented, and abeled, and are trional governmental regulations.	isignment are fully and in all respects in prop s	accurately:	Described ob	ove by proper		Pore	'tes
b. c. d. 5 Special Mondling Instructions and Additional a. DS0348 b. c. d. 6 GENERATOR'S CERTIFICATION: I hereby decimabing name and are classified, packed, in attaining to applicable international and national an	Information Waste Profile clare that the contents of this content of the content of t	isignment are fully and in all respects in prop s	accurately:	Described ob	ove by proper		on Doy	'es '
b. c. d. 5 Special Handling Instructions and Additional a. D50348 b. c. d. 6 GENERATOR'S CERTIFICATION: Thereby deciminating name and are classified, packed, in attaining to applicable international and national a	Information Waste Profile clare that the contents of this content of the content of t	issignment are fully and in all respects in propsi	accurately:	Described ob	ove by proper	Won	Onle	.)
b. c. d. 5 Special Handling Instructions and Additional a. D50348 b. c. d. 6 GENERATOR'S CERTIFICATION: Thereby determined by name and are classified, packed, noticinally a applicable international and national an	Information Waste Profile clare that the contents of this contents of the contents of this contents of the contents of th	issignment are fully and in all respects in propsi	accurately:	Described ob	ove by proper	Wor.	Onte	Tear
b. c. d. 5 Special Handling Instructions and Additional a. D50348 b. c. d. 6 GENERATOR'S CERTIFICATION: Thereby determined by name and are classified, packed, in according to applicable international and national	Information Waste Profile Clare that the contents of this contents and obeled, and are trional governmental regulations. See Additional Section of Materials.	issignment are fully and in all respects in propsi	accurately:	Described ob	ove by proper	Wor.	Onte	Tear
b. c. d. 5 Special Mandling Instructions and Additional a. DS0348 b. c. d. 6 GENERATOR'S CERTIFICATION: I hereby decided in ability name and are classified, packed, in according to applicable international and national and nat	Information Waste Profile Clare that the contents of this contents and obeled, and are trional governmental regulations. See Additional Section of Materials.	gnature	accurately:	Described ob	ove by proper	//or	Care the Day 28 Date	7es/ 84
b. c. d. 5 Special Mondling Instructions and Additional a. D50348 b. c. d. 6 GENERATOR'S CERTIFICATION. Thereby decided and are classified, packed, in according to applicable international and na process Typed Name Fig. 4. B. Dolphin 7 Transparer 1 Acknowledgement of Receipt a process Typed Name Dick Votsch 2 Transparer 2 Acknowledgement of Receipt a process Typed Name	Information Waste Profile Clare that the contents of this contents and obeled, and are trional governmental regulations. See Additional Section of Materials.	gnature	accurately:	Described ob	ove by proper	//or	Care the Day 28 Date	7es/ 84
b. c. d. 5 Special Handling Instructions and Additional a. D50348 b. c. d. 6 GENERATOR'S CERTIFICATION. Thereby derection and are classified, packed, in accounting to applicable international and na Printed Typed Name Fire A. E. Dolphin 7 Transporter 1 Acknowledgement of Receipt a Printed Typed Name Dick Votsch 8 Transporter 2 Acknowledgement of Receipt a Printed Typed Name	Information Waste Profile Clare that the contents of this contents and obeled, and are trional governmental regulations. See Additional Section of Materials.	gnature	accurately:	Described ob	ove by proper	//or	Care the Day 28 Date	7es/ 84
b. c. d. 5 Special Handling Instructions and Additional a. D50348 b. c. d. 6 GENERATOR'S CERTIFICATION. Thereby derection and are classified, packed, in accounting to applicable international and na Printed Typed Name Fire A. E. Dolphin 7 Transporter 1 Acknowledgement of Receipt a Printed Typed Name Dick Votsch 8 Transporter 2 Acknowledgement of Receipt a Printed Typed Name	Information Waste Profile Clare that the contents of this contents and obeled, and are trional governmental regulations. See Additional Section of Materials.	gnature	accurately:	Described ob	ove by proper	//or	Care the Day 28 Date	7es/ 84
b. c. d. 5 Special Handling Instructions and Additional a. D50348 b. c. d. 6 GENERATOR'S CERTIFICATION. Thereby derection and are classified, packed, in accounting to applicable international and na Printed Typed Name Fire A. E. Dolphin 7 Transporter 1 Acknowledgement of Receipt a Printed Typed Name Dick Votsch 8 Transporter 2 Acknowledgement of Receipt a Printed Typed Name	Information Waste Profile Clare that the contents of this contents and obeled, and are trional governmental regulations. See Additional Section of Materials.	gnature	accurately:	Described ob	ove by proper	//or	Care the Day 28 Date	7es/ 84
b. c. d. 5 Special Handling Instructions and Additional a. DS0348 b. c. d. 6 GENERATOR'S CERTIFICATION, Thereby determined and are classified, packed, in according to applicable international and national and na	Information Waste Profile clare that the contents of this contacted, and abeled, and are trional governmental regulations. Signature	gnature	accurately:	described ob	ove by proper t by highway	//or	Care the Day 28 Date	7es/ 84
b. c. d. 5 Special Handling Instructions and Additional a. DS0348 b. c. d. 6 GENERATOR'S CERTIFICATION, Thereby determined and are classified, packed, in according to applicable international and national and na	Information Waste Profile clare that the contents of this contacted, and abeled, and are trional governmental regulations. Signature	gnature	accurately:	described ob	ove by proper t by highway	//or	Care the Day 28 Date	7es/ 84
b. c. d. 5 Special Handling Instructions and Additional a. D50348 b. c. d. 6 GENERATOR'S CERTIFICATION: I hereby delibrating name and are classified, packed, in attaining to applicable international and national	Information Waste Profile clare that the contents of this contents of this contents of this contents and obeled, and are trional governmental regulations. Signature Sig	gnature	accurately:	described ob	ove by proper t by highway	//or	Date Date Dote	7es/ 84

UNIFORM HAZARDOUS WASTE MANIFEST	HAD1 20513957	5/12	2. Page	1 Information	ation in the pured by Fi	shoded areas ederal low
Generator's Name and Mailing Address Yakima Agric Res Lab USD	A/ARS		A. State	Manifest Doc	ument Num	ber
3706 & Nob Hill Blvd, Ya Generator's Phone (509 575-5877	kime, WA 98902		B. State	Generator's IC)	
Transparer 1 Company Name	6 US EPA ID Number		C. State	e Transporter's	10	
	1 - 7 - 8 - 8 - 8 - 8 - 8 - 8 - 8 - 8 - 8		D. Tran	sporter's Phone	!	
Transporter 2 Company Name	8 US EPA ID Number		E. State	Transporter's	10	
			F. Tran	sporter's Phone		
Chem-Security Systems, Inc.	10 US EPA ID Number		G. Stat	• Facility's ID		-
Star Route	ORD 089 452 35	3		ity's Phone 3-454-2643		
JS DOT Description Uncluding Proper Shippin		12. Con	loiners			EPA/L
		No	Туре	Total Quantity	-70 Vol	Waste No
	ontains Poison B, EHW, PO50 et weight	1	55G Drum	Δ ₂ · · ·)	226 LB	
		4 1			1	
					1	

c. d. Special Mandling Instruction, and Additional lia. b. b. c.	nformation Waste Profile Sheet Number(s)		-		
d. GENERATOR'S CERTIFICATION: Thereby decl	are that the contents of this consignment are fully and arked, and labeled, and are in a respects in proponal accernmental regulations.	accurately er condition	described for trans	above by proc port by high a	ė.	5ere
Frinted Typed Name	S grature		,		Me	onth Dny *+.
Dr. A. R. Siplin		4	<u> </u>			Page 1
*ransporter 1 Acknowledgement of Receipt of		•			24	Date onth Doy Yes
Printed Typed Nome	Signapire	17	1100	£_;	11	
Dick Vetsch Transporter 2 Acknowledgement of Receipt of	Materials	1.1	- ' \			Date
Printed Typed Name	Signature		.,		1	nih Doy Yes
Discrepancy Indication Space					1	1 1
Facility Owner or Operator Certification of rec	ceipt of hazardous materials covered by this manifes	l except as	noted in I	tem 19.		Vate
Printed Typed Name	Signature				Mo	nth Day Yea

CHARLE OF THE STREET STREET

NATIONAL RESPONSE CENTER OREGON ACCIDENT RESPONSE

Company of the Company of the Company					No. NO.	The second second
UNIFORM HAZARDOUS WASTE MANIFEST	1 Generator's US EPA ID No WAD1 20513957	Monifest Cument No.	2 Pag of			shoded areas sederal law
3 Generator's Name and Mailing Address		31000	A. Sto	te Manifest Docu	ment Num	ber
Yakima Agric. Res. Labu USI						
3706 W Nob Hill Blvd, Yaking Generator's Phone (509) 575-5877			B. Stat	te Generator's ID		
5 Transporter 1 Company Name	6 US EPA ID Num	iber	C. Sto	te Transporter's II)	
	1		D. Tro	nsporter's Phone		
7 Transporter 2 Company Name	8 US EPA ID Num	ber	E. Stat	le Transporter's IC)	
	To come to a		F. Trai	nsporter's Phone		
9 Designated Facility No-e and Site Address	10 US EPA ID Num	ber	G. Sto	te Facility's ID		,
Chem-Security Systems, Inc.						
Star Route	000 000 450	252	1	ility's Phone 3-454-2643		
Arlington, Oregon 97812	ORD 089 452	333	30			_
US DOT Description in: Juding Proper Shippin	ng Name Mazard Class, and ID Number)	12 Con	ainers	Total	Unit	EFA/
-		No	Туре	Quantity	W1/Vol	Waste No
X SEE ATTACHED SHEETC	Contains Poison B, EHW and	P066 1	55G Drus		450 LB	
Ь						
				•		
4						
				- 1		
:						
b. c. d.						
5 Special Handling Instructions and Additional Ea. D50348 b. c. d.						
6 GENERATOR'S CERTIFICATION: I hereby dec	clare that the contents of this consignment are fully narked, and labeled, and are in all respects in a	and accurately o	tescribei for trar	d above by prope	r	
occording to applicable international and nati		Joper Co. 5 on	.00.	.,poi. by agains	,	
						Date
Printed Typed Name	, Signature	/			///	onth. Day 1411
by, obert 1, olobia	<u> </u>	<u> </u>	<u> </u>			1 / 1
7 Transporter 1 Acknow edgement of Receipt of	f Materials .	•				Date
Printed Typed Name						
	Signature	1	(7)	p. de		inth Duy 1+=
Dick Vetsch	Signature	-1/0	La			11 28 84
	Signature	-1/0	Lo.			nih Duy 'es- 11 22 54 Date
	Signature	-1/2	La.			11 28 84
18 Transporter 2 Acknowledgement of Receipt of Printed Typed Name	Signature Signature	-1/0	Le.			nith Duy 1027 11 22 84 Date
18 Transporter 2 Acknowledgement of Receipt of Printed Typed Name	Signature Signature	-1/0	L.			nih Duy 'es: 11 22 54 Date
18 Transporter 2 Acknowledgement of Receipt of Printed Typed Name 19 Discrepancy Indication Space	Signature Signature Signature	nifest except as	noted in	Hem 19.		nith Duy 1027 11 22 84 Date
18 Transporter 2 Acknowledgement of Receipt of Printed Typed Name 19 Discrepancy Indication Space	Signature Signature Signature	rifest except as	noted in	Hem 19.	Mc	Date Date Date
18 Transporter 2 Acknowledgement of Receipt of	Signature Signature Signature	nifest except as	noted in	Hem 19.	Mc	Date Out fear Out fear

HEM-SECUKITE STATEMS, INC.

YAKIMA AGRIC RES LAB-1984-PESTICIDES FOR DISPOSAL MANIFEST #00228, BARREL #1

CHEMICAL	FORMULATION	HAZARD CLASS	ID# EPA#	RQ=	VET WEIGHT	GROSS WEIGHT
Carbosulfan	25%WP				1.24 kg	2.27 kg
Disulfoton	15 % G	ЕНЖ	P039		1.82 kg	12.14 kg
Ethoprop	10 % G				1.35 kg	13.5 kg
Ethoprop	15 % G				1.52 kg	10.13 kg
Ethoprop	20 % G		- 4-		3.00 kg	15.00 kg
Isofenphos	20 % G				2.20 kg	11.00 kg
LS-81-5877	15 % G				0.61 kg	4.08 kg
Methiocarb	50%WP				0.52 kg	1.04 kg
Metribuzin	75%WP				0.34 kg	0.45 kg
Mobil RJH276075	15%G				0.02 kg	0.13 kg
Mobil RJH276074	15%G				0.02 kg	0.13 kg
Mobil RJH276073	15%G				0.02 kg	0.13 kg
Phorate	20 % G	EHW	P094		1.97 kg	9.87 kg
Terbufos	15 % G				1.26 kg	8.34 kg

YAKIMA AGRIC LAB-1984-PESTICIDES FOR DISPOSAL MANIFEST #00229, BARREL #2

CHEMICAL	FORMULATION	HAZARD CLASS	ID#	EPA#	RQ=	ET WEIGHT	GROSS WEIGHT
Carbofuran	10 % G		UN2757			0.43 kg	4.32 KG
Carbosulfan	25%WP					1.14 kg	4.56 kg
Carbosulfan	15 % G			1	•	1.14 kg	4.56 kg
DPX 8175,	5 % G					0.005 kg	0.10 kg
Fensulfothion	15 % G					2.03 kg	13.53 kg
Fonofos	10 % G.					1.59 kg	15.89 kg
Isofenphos	20 % G					0.32 kg	1.59 kg
Isofenphos	6EC			•		0.38 kg	0.52 kg
Terbufos	15 % G					0.68 kg	4.54 kg

YAKIMA AGRIC RES LAB-1984-PESTICIDES FOR DISPOSAL MANIFEST #01505, BARREL #3

CHEMICAL	FORMULATION	HAZARD CLASS	ID#	EPA#	RQ=	NET WEIGHT	GROSS WEIGHT
Aldicarb	15%G	EHW		P069		0.82 kg	5.45 kg
Bay ARL3800	10%G					0.07 kg	0.68 kg
Bay ARL4077	10%G					0.02 kg	0.23 kg
Bay FCP1272	200EC					0.19 kg	0.76 kg
Bay MAT5155	50%WP					0.23 kg	0.45 kg
Bay MAT5927	50%WP					0.23 kg	0.45 kg
Bay SIR8514	25%WP					0.62 kg	2.50 kg
Bay SIR14591	25%WP					0.11 kg	0.46 kg
BTS48011	50%FL					0.23 kg	0.45 kg
Carbofuran	4F		UN2757			2.04 kg	4.38 kg
Chlorpyrifos	4E		NA2783		1	0.17 kg	0.91 kg
Cypermethrin	2.5EC					0.03 kg	0.10 kg
Decamethrin	2.5%EC					0.01 kg	0.40 kg
Demeton	6E					5.56 kg	7.72 kg
Diazinon	2FM					0.01 kg	0.05 kg
Endosulfan	3EC	EHW		P050		1.53 kg	3.57 kg
Fenamiphos	3E					0.34 kg	1.00 kg
Fenvalerate	2.4E					1.91 kg	6.58 kg
FMC54800	2E					0.03 kg	0.11 kg
HAG-107	0.3E					0.03 kg	0.11 kg
Isofenphos	6EC					0.38 kg	9.08 kg
Methamidophos	10%G					0.20 kg	2.04 kg
Methomyl	1.8EC	EHW		P066		0.20 kg	0.94 kg

MANIFEST #01505, BARREL #3

Page 2

CHEMICAL	FORMULATION	HAZARD CLASS	#U1	EPA#	RQ=	NET WEIGHT	GROSS WEIGHT
MK936	0.03SL	m				0.003 kg	0.11 kg
Monocrotophos	SEC	1				0.57 kg	0.95 kg
Oxamyl	2E /					0.80 kg	3.18 kg
Permethrin	2E emlace					0.23 kg	0.91 kg
Resmethrin	2EC					0.11 kg	0.46 kg
RH0994	4EC					0.28 kg	0.57 kg
RU25474	0.3EC					0.02 kg	0.06 kg
Thiofanox	10%G	EHW		P045		0.14 kg	1.36 kg

YAKIMA AGRIC RES LAB-1984-PESTICIDES FOR DISPOSAL MANIFEST #01506, BARREL #4

CHEMICAL	FORMULATION	HAZARD CLASS	ID#	EPA#	RQ# VET WEIGHT	GROSS WEIGHT
DDT	20%E	EHW		U061	0.10 kg	0.48 kg
Fonofos	10%G				0.81 kg	8.14 kg
Fonofos	20%G				2.27 kg	11.35 kg
Malathion	25%E				0.89 kg	3.58 kg
Malathion	50%E				0.05 kg	0.14 kg
Oxydemetonmethyl	25%E				3.81 kg	15.24 kg
Phorate	15 % G	EHW		P094	2.21 kg	14.76 kg
RU25474	0.3EC				0.03 kg	0.11 kg
Sulfur	75%P				0.24 kg	0.32 kg
Trichlorfon	40.5%E				6.95 kg	17.16 kg
Vernolate	6.7E				2.28 kg	2.85 kg
					19.69 Kg	74/3
					43.2116	163.69

YAKIMA AGRIC RES LAB-1984-PESTICIDES FOR DISPOSAL MANIFEST #01507, BARREL #5

CHEMICAL.	FORMULATION	HAZARD CLASS	ID#	EPA#	RQ=	NET WEIGHT	GROSS WEIGHT
Azinphosmethyl	50%WP					0.68 kg	1.36 kg
Benomyl	50%WP					0.45 kg	0.91 kg
Chlorpyrifos	4E		NA 2783	,	1	1.59 kg	4.31 kg
Diazinon	50%E					1.92 kg	4.77 kg
Dicofol	18%WP					2.78 kg	15.44 kg
Endosulfan	50%WP	EHW		P050		2.04 kg	4.09 kg
Endrin	1.6EC	EHW		P051,D012		3.63 kg	18.15 kg
Ethylan	4EC					4.54 kg	9.08 kg
Methanal	100%	EHW		U122		3.18 kg	3.18 kg
Methoxychlor	25%EC			U247,D014		0.12 kg	0.48 kg
Parathion	25%WP	EHW		P089		0.78 kg	3.18 kg
Propargite	30%W		N2765		10	0.41 kg	1.35 kg
Toxaphene	25%E	EHW		P123,U224,D01	5	0.12 kg	0.48 kg
2,4-D	44%	EHW		U240,D016		1.82 kg	4.77 kg

YAKIMA AĞRIC RES LAB-1984-PESTICIDES FOR DISPOSAL MANIFEST #01508, BARREL #6

CHEMICAL	FORMULATION	HAZARD CLASS	ID#	EPA#	RQ=	NET WEIGHT	GROSS WEIGHT
Amitrole	22 % E					3.00 kg	14.53 kg
n-Butyl alcohol	100%					4.08 kg	4.08 kg
Dicofol	18%WP					2.94 kg	16.34 kg
Endosulfan	3EC	EHW		P050		1.84 kg	5.11 kg
Linuron	50%WP					0.68 kg	1.36 kg
2,4-D	18%	EHW		U240,D016		0.24 kg	1.36 kg

YAKIMA AGRIC RES LAB-1984-PESTICIDES FOR DISPOSAL MANIFEST #01509, BARREL #7

CHEMICAL	FORMULATION	HAZARD CLASS	ID#	EPA#	RQ=	HET WEIGHT	GROSS WEIGHT
Acephate	75 % SP					5.7g	7.6g
Diuron	80%WP					45.48	56.8g
Fenvalerate	2.4E					27.2g	93.9g
Methamidophos	4EC					85.1g	170.3g
Methomyl	1.8EC	EHW		P066		2.0g	9.38
Phosalone	3EC					3.7g	10.3g
Trifluralin	4EC					34.0g	68.0g

See attucked.

Attn: Judy Vance USDA, ARS 3706 W. Nob Hill Blvd. Yakima, WA 98902 Debbie Gordy Delini Col

Accounting Technician

589-6695 local

6/18/84

-					
\$10.	****			, f ee ee	
<i>i</i>	:	*****	• • • •		. 19.2
1 2 2 2		Vai ima . w.	→ 3706 E.	Mob Hill Go	ulevant
ire -Security Carters, Inc.		170f W. Nob M	ill Sculeva	ord/Yatima.	MA 90902
	the Conson Highway	F. C. Box 600	tional Fina DCC New Or (○>)		70160
\$6 \$4" \$0 BAY	OR CARRIES USE ONLY	APPROPRIATION COMMENS 301 - 597 CONTRACTORS ST. SETUR FROM WHISP RECEIVES	05-20224	DLED BALLS OF LADIAL	10 60×100×10° 1150E
to compare a classificate	en produced in a production of the second description of the second descriptions.	MEMORY: PAGEAGET	WHIT?	POP BE P PLI'A	Coraci. Cia.!
C DRUM: Mixed pesticides*(in	secticides & herbi	24366 24367 24368 24369 24370 35499	35 1bs each		
		**** * j. gr.	i iii (a. ii.		
Si Oscialità E	* . * . *		Yakima, WA - J. CROOKS - L. Administ A/ARS	rative Offi	62 ker A 97902
CERTIFICATE OF CARRIER BALLING	FOR CHARGES-CONS	GNEE MUST NOT	PAY ANY CH	ARGES ON THIS	SHIPMENT

APPENDIX B

WATER SHIPPLY WELL REFORDS FOR YAKIMA (WA)
AS PROVIDED BY WASHINGTON DEPARTMENT OF ECOLOGY

Original and First Copy with partment of Ecology ond Copy — Owner's Copy ord Copy — Driller's Copy

WATER WELL REPORT

Application No.

TYPE OF WORK: Owner's number of well (If more than one) New well Method: Dug Deepened Cable Reconditioned Rotary	Municipal Other Bored Driven Driven Inches.	(10) WELL LOG: Formation: Describe by cold show thickness of aquifers a stratum penetrated, with at MATI	or, character, size of rand the kind and naticleast one entry for ERIAL	naterial and straire of the mater sach change of FROM	icture, and
PROPOSED USE: Domestic Industrial Intrigation Test Well Intrigation Test Well Intrigation Method: Dug Interpreted Method: Dug	Municipal Other Bored Driven Driven Inches.	(10) WELL LOG: Formation: Describe by cole show thickness of aguifers stratum penetrated, with at MATI BAOCOA BASO BLACK BASO ROD BAOKOM	or, character, size of rand the kind and naticleast one entry for ERIAL	naterial and struse of the material and struse of the material and struse of FROM FROM 6 30 Le 63	ucture, amidal in each formation
PROPOSED USE: Domestic Industrial	Other Bored Driven Driven Inches.	(10) WELL LOG: Formation: Describe by cole show thickness of aguifers stratum penetrated, with at MATI BAOCOA BASO BLACK BASO ROD BAOKOM	or, character, size of rand the kind and natice least one entry for ERIAL SLT - Shall Rect & Shall	naterial and struire of the material and struire of the ma	ucture, and ial in each formation TO 5
TYPE OF WORK: Owner's number of well (if more than one) New well Method: Dug Deepened Cable Reconditioned Rotary DIMENSIONS: Deepth or complete Cable Depth or complete Cable Depth or complete Cable Cable Depth or complete Cable Depth or complete Cable Cable Depth or complete Cable Depth	Other Bored Driven Driven Inches.	Formation: Describe by cole show thickness of aquifers a stratum penetrated, with a MATI TO COLE BACKOA (345) BACKOA (345) Rod BAOKOM	i least one entry for ERIAL SLTO-SLAL Rock & Shople	FROM O STORY O STORY STOR	TO 5
TYPE OF WORK: Owner's number of well (if more than one) New well Method: Dug Deepened Cable Reconditioned Rotary DIMENSIONS: Deepth or complete Cable Depth or complete Cable Depth or complete Cable Cable Depth or complete Cable Depth or complete Cable Cable Depth or complete Cable Depth	Bored Driven Dri	BAOROA BAORON RODA BAOROA BA	i least one entry for ERIAL SLTO-SLAL Rock & Shople	FROM O STORY O STORY STOR	TO 5
New well Method: Dug Deepened Cable Reconditioned Rotary Dimensions: Dimensions: Diameter of well Society Depth or completed Cable Reconditioned Rotary Depth or completed Cable Reconditions Threaded Depth or completed Cable Reconditions Threaded Depth or completed Cable Reconditions Threaded Depth or completed Cable Reconditions To Diam. from Cable Reconditions Threaded Depth or Cable Reconditions To Diam. from Cable Reconditions Threaded Depth or Cable Reconditions Threaded Depth or Cable Reconditions To Diam. from Cable Reconditions Threaded Depth or Cable Reconditions To Diam. from Cable Reconditions Threaded Depth or Cable Reco	Bored Driven Dri	BAORON BAORON BAORON BAORON BAORON BAORON BAORON BAORON BA	erial one entry for ERIAL SLT - Slab. Rectash	FROM 6 9 5 30 42 63	TO 5
New well	Bored Driven Dri	BAOROM BASO DLACKBASO RODDOKEM BAOROM	Rectasho	6 e 5 30 4 e 6 3	5
Deepened	Driven D Jetted D inches. 5 5 7. to 70 n. to n. to n.	BAOCON 13450 DLACKBASO Rod BAOKem BAOLON	Rockasho	e 5 30 4e 63	30
DIMENSIONS: Depth of completed — 5 CONSTRUCTION DETAILS: Casing installed: 6 "Diam from 0 ft. Threaded "Diam from ft. Welded "Diam from ft. Welded "Diam from ft. Welded "Diam from ft. Type of perforator used SIZE of perforations in. by perforations from ft. to perforations from ft. to perforations from ft. to	to 60 n. to n. to n.	DLACKBASO Rod Broken Broken	Rockasho	30 Le 63	+
Drilled. 3.5. 2. A. Depth of completed	to 60 n. to n. to n.	Broken Ponis Broken Gad	D -/-	265	73 225 265 740 372
Drilled. 3.5. 2. A. Depth of completed	to 60 n. to n. to n.	Broken Ponis Broken Gad	D -/-	265	225 265 740 3/2
Casing installed: 6 "Diam from 0 ft. Threaded "Diam from ft. Welded "Diam from ft. Perforations: Yes No Type of perforator used in. by perforations from ft. to perforations from ft. to perforations from ft. to perforations from ft. to	to ft. to ft.		D -/-	265	265 240 372
Casing installed: 6 "Diam from 0 ft. Threaded "Diam from ft. Welded "Diam from ft. Perforations: Yes No Type of perforator used in. by perforations from ft. to perforations from ft. to perforations from ft. to perforations from ft. to	to ft. to ft.		D -/-	265	340
Threaded "Diam. from ft. Welded Diam. from ft. Perforations: Yes No No Diam. from ft. Type of perforator used in. by perforations from ft. to	to ft. to ft.	Broken Bros	WN BASAL	7 340	352
Welded D "Diam. from ft. Perforations: Yes No D Type of perforator used	to ft.				
Perforations: Yes No D Type of perforator used	in.				
Type of perforator used	in.				
SIZE of perforations in. by ft. to ft. to perforations from ft. to perforations from ft. to ft. to	in.				-
perforations from ft. to ft. ft. to ft. ft. to ft.					-
G					
Samonnes	<u>n</u>				
Screens: Yes No D	- 1				
Manufacturer's Name			- 	4	
Type Model No					
Diam. Siot size from ft.		DECL	3.4		
Consol people de		11 -1, -;			
Gravel placed from		100° 0.6			
		Jul. 7			
Surface seal: Yes No To what denth?	60 n	nes-emiles i			
Material used in seal S. R.A. C. P. Did any strata contain unusable water? Yes	No 🖸	0-111	- 24		
Type of water? Depth of strata		U			
Method of sealing strata off					
) PUMP: Manufacturer's Name					
Туре:					ļ
) WATER LEVELS: Land-surface elevation					
above mean sea level tic level					
region pressure. The per square inch. Date					
Artesian water is controlled by (Cap, valve	e etc.)		- 4		
Drawdown is amount water lowered below static level	level 1s	Work started 5-26	_, 1922. Completed	5-31	. 128
a a pump test made? Yes No If yes, by whom?ld: gal./min. with ft. drawdown after	hrs.	WELL DRILLER'S S			
ad; gar/mm. with it. drawdown after	mrs.			Alon and Abla	
. N		This well was drilled true to the best of my l			report n
covery data (time taken as zero when pump turned off)	(water level	P	1 5		
measured from well top to water level) 'ime Water Level Time Water Level Time V	Water Level	NAME EAST WOO (Person, fi	d Drift	My Co	1
		_	0.1		
		Address 22.62 R	vergay	ANIMA	, WA
Date of test	2 hrs	[Signed]	1 asist		•
esian flowg.p.m. Date			- (Well trailer)		7
nperature of water	Yes 🗆 No 📭	License No. 0.495	Date.6	-/	, 19/\$
		~	AD.		

File Original and First Copy with Department of Ecology Second Copy — Owner's Copy Third Copy — Driller's Copy

WATER WELL REPORT

Application No.

	WASHINGTON Permit No		
(1) OWNER: Name (b)(6)	(b)(6)		
		17	
2) LOCATION OF WELL: Courky	- 5W 1 5W 16 Sec. 34 T.) N., R.	W.M.
earing and distance from section or subdivision corner		Λ	
(3) PROPOSED USE: Domestic [Industrial Municipal Irrigation Test Well Other		ial and stri	icture, and
	show thickness of aquifers and the kind and nature of stratum penetrated, with at least one entry for each	the mater	ial in each
(4) TYPE OF WORK: Owner's number of well (if more than one)	MATERIAL	FROM	TO
New well Method: Dug Bored B	TON SAIL ME Brown to	0	8
Deepened Cable Driven Reconditioned Reconditioned	101 10 01		
Accommodated 1	Gravel & CLAV	8	18
(5) DIMENSIONS: Diameter of well inches. Drilled // n. Depth of completed well /06 n.		16	Tinh
APA AMANAMATA TATA	travel rung signi	10	100
(6) CONSTRUCTION DEIAHAS			
Casing installed: 6 "Diam from T 1 n to 105 n			1 460
Threaded "Diam. from ft. to ft.			
Welded 😭			
Perforations: Yes No D			_
Type of perforator used			
SIZE of perforations in. by in.			
perforations from ft. to ft.			
perforations fromft. toft.			
perforations from ft. to ft.			
Screens: Yes No No			
Manufacturer's Name			
Type Model No			
Diam. Slot size from ft. to ft. Diam. Slot size from ft. to ft.			- 25
Dialit. Sandra Side Side Anguarda Maria Allanda Alland			
Gravel packed: Yes No Size of gravel:			
Gravel placed from ft. to ft.			
Surface seal: Yes No D To what depth? B n. Material used in seal Bentinite			
Did any strata contain unusable water? Yes No			
Type of water? Depth of strata			
Method of sealing strata off	DECEMBER		
(7) PUMP: Manufacturer's Name			
Type:HP	())		
	115 11 10 1005		
(8) WATER LEVELS: Land-surface elevation above mean sea level	(\		
Static levelft. below top of well Date	UU		
Artesian pressurelbs. per square inch Date	DEPARTMENT DE ELLEGIST		
Artesian water is controlled by (Cap, valve, etc.)	CENTRAL REGION OF FILE		
(0) WELL TESTS. Drawdown is amount water level is			-
lowered below static level	Work started 6/5, 1983 Completed	6/7	, 1987
Was a pump test made? Yes No If yes, by whom?	WELL DRILLER'S STATEMENT:		
Yield: Z gal./min. with ft. drawdown after hrs.			
	This well was drilled under my jurisdiction true to the best of my knowledge and belief.	and this	report is
Recovery data (time taken as zero when pump turned off) (water level		12.	1: 1
measured from well top to water level)	NAME PONT IN M-GUITC (Person, firm, or corporation)	//r///	196
Time Water Level Time Water Level Time Water Level		Type or pr	int)
	Address 1813 813356		
	12 / 22 /		*************
Date of test	(Simula Kiril) / plan.		
Bailer test gal/min, with ft. drawdown after hrs.	[Signed] (Well Driller)		
Artesian flowg.p.m. Date	142	113	, 19.8
Temperature of water	License No. Date D	- f	, 19

Second Copy — Owner's Copy	MALER WE	ALL REPORT	No.	/
Third Copy — Driller's Copy	STATE OF V	VASHINGTON Permit No		
(1) OWNER: Name (b)(6)		(b)(6)	MA 11/2	7
(2) LOCATION OF WELL: County YA	VKIMA	-1 1 Set 35 T	13 N. R.	18 WM
Bearing and distance from section or subdivision corn		of 1615 Ft of Elso Fof w	YNEI	79652
(3) PROPOSED USE: Domestic M Industri	ial Municipal	(10) WELL LOG:		
Irrigation [] Test W	ell 🗀 Other 📋	Formation: Describe by color, character, size of mater show thickness of aquifers and the kind and nature of	I the mater	
(4) TYPE OF WORK: Owner's number of w		stratum penetrated, with at least one entry for each	FROM	formation.
New well Method: Di	ug 🛘 Bored 🗖	TAD WI	0	5
_	able Driven otary Jetted	77.00		-
(5) DIMENSIONS: Diameter of well	6 inches.	Conglombert	5	36
Drilled	7 4	1000	3/2	1111-
(e) CONCEDUCATION DETAILS.		Cray .	1343	77
(6) CONSTRUCTION DETAILS:	40-	Brown Lava Pock And		
Threaded [] "Diam. from		4. 10.	1111	17.
Welded "Diam. from		greva vigoro	44	200
Perforations: Yes No		1 1		
Type of perforator used				
SIZE of perforations in. by				
perforations fromi				
perforations from	t. to ft.			
Screens: Yes No				
Manufacturer's Name Model	No			
Diam. Slot size from				
Diam. Slot size from	ft. to ft.			
Gravel packed: Yes 🖂 No 📈 Size of gr	avel:			
Gravel placed from ft. to				
Surface seal: Yes No _ To what dep	th? 18 ft n			
Material used in seal Bontonite				
Did any strata contain unusable water? Type of water?	Yes No No			
Method of sealing strata off				
(7) PUMP: Manufacturer's Name				
Туре:				
(8) WATER LEVELS: Land-surface elevation above mean sea level				-
Static level 2 12 ft. below top of well	Date 4-3-74			
Artesian pressurelbs. per square inch	Date			
Artesian water is controlled by (Cap.	valve, etc.)			
(9) WELL TESTS: Drawdown is amount we lowered below static le				.74
Was a pump test made? Yes No If yes, by who		Work started 7 , 18/7. Completed 7.		19.4
Yield: JS gal./min. with ft. drawdown	after hrs.	WELL DRILLER'S STATEMENT.		
" Transla willelle		This well was drilled under my jurisdiction true to the best of my knowledge and belief.	and this	report is
Recovery data (time taken as zero when pump turned	d off) (water level	9 + 00 W		0
measured from well top to water level) Time Water Level Time Water Level Time	e Water Level	NAME CONCESSOR OF CONCORDING	Type or pr	16.C.
		9909 8	1	-
		Address of all of fewer feat	yak	and a
Date of test		[Signed] Chester Mars	Linger	1
r testgal/min. withft. drawdown		(Well Driller)	-	ni
rtesian flowg.p.m. Date Temperature of water	1 1	License No 0/12 Date 4	- 2	. 19.//
		The state of the s		

File Original and Pirst Copy with Department of Ecology Second Copy — Owner's Copy Third Copy — Driller's Copy

WATER WELL REPORT

STATE OF WASHINGTON

А	ומט	102	tio	n N	io

(1) OWNER: Name (b)(6)	(b)(6) Address		
(2) LOCATION OF WELL: County AMIMA	NW 45614 Sec 34 T/	7 2 2	12
aring and distance from section or subdivision corner			W.M
(3) PROPOSED USE: Domestic & Industrial Municipal	(10) WELL LOG:		
Irrigation Test Well Other	Formation: Describe by color, character, size of materi	al and stru	cture, and
(4) TYPE OF WORK. Owner's number of well	show thickness of aquifers and the kind and nature of stratum penetrated, with at least one entry for each	the materi change of	ial in each formation.
(if more than one)		FROM	TO
New well Method: Dug Bored Deepened Cable Driven		0	7_
Reconditioned Rotary Jetted		7	nn
(5) DIMENSIONS: Diameter of well	Gravely CUBRLOS, SILT	7	da
Drilled 49 tt. Depth of completed well 44 f			
(C) CONCEDUCTION DETAILS.	FSILT, BIBLE	122	146
(6) CONSTRUCTION DETAILS:			
Casing installed: not to not	GRAUNI, SAIND, SOME		
Welded 4 64 "Diam from #1 th. to 46 by the		46	49
		-	
Type of perforator used			
SIZE of perforations in. by in			
perforations from			
			
Screens: Yes No		-	-
TypeModel No			
Diam. Slot size from ft. to ft Diam. Slot size from ft. to ft			
Gravel packed: Yes No Size of gravel:			
Gravel placed from ft. to ft			
Surface seal: Yes No D To what depth? / X T n.			
Material used in seal LS TTO MITTO			
Type of water? Depth of strata			
Method of sealing strata off			
(7) PUMP: Manufacturer's Name			
Type:HP			
(8) WATER LEVELS: Land-surface elevation		 	
static level 7. the below top of well Date 1-30-79			
Artesian pressurelbs. per square inch Date			
Artesian water is controlled by			
(a) WELL TESTS. Drawdown is amount water level is			
lowered below static level	Work started / J., 1927. Completed	1-31	19/ 7
Was a pump test made? Yes No If yes, by whom?	WELL DRILLER'S STATEMENT:		
" AID TOST 30 GPM "	This well was drilled under my jurisdiction	and this	report is
" " " "	true to the best of my knowledge and belief.		
Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)	CASSOL (JEIL DA	21111	NE
Time Water Level Time Water Level Time Water Level	(Person, firm, or corporation)	Type or pr	rint)
	Address BOS LUFLHER, VAL	MM	414
		>	
Date of test	[Signed] aww// Con	i	<i>)</i>
aller testgal/min, withft, drawdown afterhrs.	(Well Driller)		
Artesian flowg.p.m. Date	License No. 00 73 Date	31	., 19.29

March 181337-317-6

File Original and First Copy with
Department of Ecology
Second Copy — Owner's Copy Third Copy — Driller's Copy

WATER WELL REPORT

Appl	cation	No

	WASHINGTON Permit No	. /	Jan
(1) OWNEB: Name (b)(6)	(b)(6)		
LOCATION OF WELL: County 8013	41 stare NW Wyw 16 Sec 34 I	138 R 1	X W M
Bearing and distance from section or subdivision corner	chins Road add Vol'y "1Ps	Por 46 P.	acro
(3) PROPOSED USE: Domestic M Industrial Municipal	(10) WELL LOG:		y.
Irrigation Test Well Other	Formation: Describe by color, character, size of mate show thickness of aquifers and the kind and nature c stratum penetrated, with at least one entry for each	rial and structs of the material change of for	in each
(4) TYPE OF WORK: Owner's number of well (if more than one)	MATERIAL	FROM	TO
New well Method: Dug Bored Deepened Cable Driven D		Q	8
Reconditioned Rotary Jetted	Clay + BOULDERS	40	40
(5) DIMENSIONS: Diameter of well inches.	SAND + GRAVEL	48	10
(6) CONSTRUCTION DETAILS:			
Casing installed: 6 " Diam from 0 n to 57 n			
Threaded" Diam. from ft. to ft.			
Welded "Diam. from ft. to ft.			
Perforations: Yes No X			
Type of perforator used			
SIZE of perforations			
perforations from th. to ft.			
perforations from ft. to ft.	DECEMEN		
Screens: Yes Not	KELEIVEU		
Manufacturer's Name			
Type Model No	OCT 18 1977		
Diam. Slot size from ft. to ft. Diam. Slot size from ft. to ft.			
	DEFARTS ON UT EDULUGI		
Gravel packed: Yes No Yo Size of gravel:	CARACTE BESIDEST GREEKE		
Gravel placed fromft. toft.			
Surface seal: Yes No To what depthy ft.			
Material used in seal Benton (te			
Did any strata contain unusable water? Yes No Type of water?			
Method of sealing strata off			
(7) PUMP: Manufacturer's Name			
Type:			
above mean sea leveltt.			
Static levelft. below top of well Date			
Artesian water is controlled by			
(Cap, valve, etc.)			
(9) WELL TESTS: Drawdown is amount water level is lowered below static level	Work started, 19 Completed		19
Was a pump test made? Yes No I If yes, by whom?	WELL DRILLER'S STATEMENT:		
Yield: gal./min. with ft. drawdown after hrs.		and this no	nowt in
	This well was drilled under my jurisdiction true to the best of my knowledge and belief.	and this re	port is
Recovery data (time taken as zero when pump turned off) (water level	1/	6	
measured from well top to water level) Time Water Level Time Water Level Time Water Level	NAME (Person, firm, or corporation)	(Type or print	t)
	LIND (1) AC	C ypt or print	-,
	Address	A	
Date of test	A K. Thank	572	
Date of test	[Signed] (Well Driller)		
Artesian flow	206	- 0/	7-
Temperature of water	License No. Date 7	- 1. V,	19//

File Original and First Copy with Department of E biogy Second Copy — Gwner's Copy Third Copy — Driller's Copy

WATER WELL REPORT STATE OF WASHINGTON

(b)(6)

Application No.

Permit No. . . .

	Address
(2) LOCATION OF WELL: COUNTY YAKIMA.	- NW 16 5W 16 Sec 34 T/3 N, R/8 WM
earing and distance from section or subdivision corner	Too see a see
(3) PROPOSED USE: Domestic M Industrial Municipal D	(10) WELL LOG:
Irrigation Test Well Other	Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation
(4) TYPE OF WORK: Owner's number of well (if more than one)	MATERIAL FROM TO
New well Method: Dug Bored D	TOP SOIL (MED B) FAM O 6
Deepened ☐ Cable ☐ Driven ☐ Reconditioned ☐ Rotary ☑ Jetted ☐	COMBLOMERATE " HARD 6 85
(5) DIMENSIONS: Diameter of well 5 inches. Drilled ft Depth of completed well 70 ft.	SANOSTONE N FAST 85 90
(8) CONSTRUCTION DETAILS:	
Casing installed: 5 " Diam. from 0 n to 51 n.	
Threaded Diam. from ft. to ft.	
Welded Diam. fromft. toft.	
Perforations: Yes No X	
Type of perforator used	
SIZE of perforations in. by in.	(i)
perforations fromft. toft	
perforations from ft. to ft.	31
Company	-
Screens: Yes No No No Manufacturer's Name.	F
Type Model No	
Diam. Slot size from ft. to ft.	(W) CHIMACTON (E)
Diam. Slot size from ft. to ft.	
Gravel packed: Yes No Size of gravel:	5
Gravel placed fromft. toft.	
Surface seal: Yes No D To what depth? 18 ft. Material used in seal 6 EVT ON IT E	NEW F
Did any strata contain unusable water? Yes No	
Type of water? Depth of strata	1-1
Method of sealing strata off	
(7) PUMP: Manufacturer's Name	0
Туре: НР	(5)
(8) WATER LEVELS: Land-surface elevation Αρρ. 1100 m.	
Static level 10 th. below top of well Date //-7-79	
Arterian pressure	
Artesian water is controlled by (Cap, valve, etc.)	
(3) WELLE IESIS. lowered below static level	Work started 11-1 , 1979. Completed 11-7 , 1979
Was a pump test made? Yes No of If yes, by whom?	WELL DRILLER'S STATEMENT:
"WITH AIR. "	This well was drilled under my jurisdiction and this report is
	true to the best of my knowledge and belief.
Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level) Time Water Level Time Water Level Time Water Level	NAME JENSENS WELL DRILLING & DRIV
Time Water Level Time Water Level Time Water Level	(Person, firm, or corporation) (Type or print) Address /603 So. /67H AUE.
1	Address R O
Date of testailer testal/min. withft. drawdown afterhrs.	[Signed] (Fight Driller)
Artesian flow	11-19 70
Temperature of water 5 % Was a chemical analysis made? Yes 1 No 2	License No. 0217 Date 1977

ile Original and First Copy with chartment of Ecology econd Copy — Owner's Copy hird Copy — Driller's Copy

WATER WELL REPORT

STATE OF WASHINGTON

Application No.

rippire		410	/
Permit	No		/

1) OWNER: Name. (b)(6)	(b)(6)	
2) LOCATION OF WELL: County YAKIMA		918
earing and distance from section or subdivision corner	74 3000000000000000000000000000000000000	rW.W.
5) PROPOSED USE: Domestic M Industrial Municipal	(10) WELL LOG:	
Irrigation Test Well Other	Formation: Describe by color, character, size of material and st show thickness of aquifers and the kind and nature of the mat stratum penetrated, with at least one entry for each change of	ructure, and erial in each
4) TYPE OF WORK: Owner's number of well (if more than one)	MATERIAL FROM	
New well Method: Dug Bored Deepened Cable Driven Driven	TOP SOIL O	6
Deepened ☐ Cable ☐ Driven ★ Reconditioned ☐ Rotary ☐ Jetted ☐	COM GLOME RATE 6	20
E) DIMENSIONS.		
5) DIMENSIONS: Diameter of well 2 inches. Depth of completed well 20 nt.		
6) CONSTRUCTION DETAILS:		1
Casing installed: 2 "Diam. from O n. to 20' n.		
Threaded		
Perforations: Yes 🗔 No 🗑		
Type of perforator usedin. byin.		
perforations from ft. to ft.	DRIVEN	
perforations fromft. toft.		
perforations from ft. to ft.	WELL	
Screens: Yes No 🗹		
Manufacturer's Name		
Diam. Slot size from ft. to ft.		
Diam. Slot size from ft. to ft.		
Gravel packed: Yes No N Size of gravel:		
Gravel placed from ft. to ft.		
Surface seal: Yes & No To what depth? rt.		
Material used in seal BENTUNITE & CEMENT BRIVE		
Did any strata contain unusable water? Yes 🗌 No 🗋	OCCCIVED	
Type of water? Depth of strata Method of sealing strata off	RECEIVED	
	1111 4 2 4070	
(7) PUMP: Manufacturer's Name	JUL 13 19/6	
	DEPARTMENT OF ECOLOGY	
(8) WATER LEVELS: Land-surface elevation App 1080 tt.	CENTRAL REGIONAL OFFICE	
static level 6' ft. below top of well Date 6-21-76	GENTIVAL MEGIONAL OLLIOL	
Artesian water is controlled by		
(Cap, valve, etc.)		
9) WELL TESTS: Drawdown is amount water level is lowered below static level	Work started 6-21 1076 Completed 6-21	w7/-
Was a pump test made? Yes \(\text{No } \text{X} \) If yes, by whom?	Work started	, 19.75
field: 10 gal./min. with tt. drawdown after hrs.	WELL DRILLER'S STATEMENT:	
	This well was drilled under my jurisdiction and thi true to the best of my knowledge and belief.	s report is
decovery data (time taken as zero when pump turned off) (water level	,	
measured from well top to water level) Time Water Level Time Water Level Time Water Level	NAME JENSENS WELL DRILLING & (Person, firm, or corporation) (Type or	D RI U I N
	Address 1603 50. 1074 AUE.	
	Address	
Date of test	[Signed] Dlownce Jensen	
ther testgal/min. withft. drawdown afterhrs.	[Signed]. (Well Offiler)	
rtesian flowg.p.m. Date	License No. 0218 Date 6-23	19.76
	and the second s	

File Original and First Copy with Department of Ecology Second Copy - Owner's Copy Third Copy - Driver's Copy

WATER WELL REPORT

STATE OF WASHINGTON

Application No. .

Permit No	 /

· ·

(1) OWNER: Name (b)(6)	(b)(6)	
(2) LOCATION OF WELL: County JAKIMA		- 1 0
earing and distance from section or subdivision corner		., R./ (W)
	(10) THEY L LOC.	
(3) PROPOSED USE: Domestic X Industrial D Municipal D	(10) WELL LOG:	Lateriation
Irrigation Test Well Other	Formation: Describe by color, character, size of material and show thickness of aquifers and the kind and nature of the stratum penetrated, with at least one entry for each change	iaterial in eac
(4) TYPE OF WORK: Owner's number of well (if more than one)		OM TO
New well Method: Dug Bored D	TOP SOIL (0 5
Deepened ☐ Cable ☐ Driven M Reconditioned ☐ Rotary ☐ Jetted ☐	COMGLOMERATE	5 21
(5) DIMENSIONS: Diameter of well inches. Drilled the Depth of completed well 21 ft.		-
Drined It. Depth of completed went		-
(6) CONSTRUCTION DETAILS:		
Casing installed: 2 " Diam from 9 n. to 21 n.		
Threaded "Diam. from ft. to ft.		
Welded 2 1. Diam. from		
Perforations: Yes No 😿		
Type of perforator used		
SIZE of perforations in. by in.		
perforations from		
perforations from ft. to ft.		
Canadana		
Screens: Yes No Manufacturer's Name		
Type Model No	DKINEN	
Diam. Slot size from ft. to ft.	WELL	
Diam. Slot size from ft. to ft.		
Gravel packed: Yes No No Size of gravel:		
Gravel placed from ft. to ft.		
Surface seal: Yes No To what depth? ft.		
Material used in seal BENTONITE	PECEIVED	
Did any strata contain unusable water? Yes [No [NEULITED	
Type of water? Depth of strata	1111 1 3071	
Method of sealing strata off	JUL 13 1976	
(7) PUMP: Manufacturer's Name	DEPARTMENT DE ECOLOGY	
Type: H.P	CENTRAL REGIONAL DEFICE	
(8) WATER LEVELS: Land-surface elevation APP. 1080 n.	VENTIONE MEGIOTIAL DIFFICE	
Static level 6' ft. below top of well Date 6-21-76		
Artesian pressure lbs. per square inch Date		
Artesian water is controlled by (Cap, valve, etc.)		
(9) WELL TESTS: Drawdown is amount water level is lowered below static level	Work started 6-21, 1976. Completed 6-21	, 1974
Was a pump test made? Yes ☐ No M If yes, by whom?	WELL DRILLER'S STATEMENT:	
Yield: 10 gal./min. with ft. drawdown after hrs.		
	This well was drilled under my jurisdiction and t true to the best of my knowledge and belief.	inis report is
Recovery data (time taken as zero when pump turned off) (water level		
measured from well top to water level)	TVAMED. 7. W	DRIVING
Time Water Level Time Water Level Time Water Level		or print)
	Address 1603 So. LOTH AVE.	
	00)
Date of test	[Signed] Source Jensey	
eller test gal/min, with ft. drawdown after hrs.	(Well Daller)	
Temperature of water 52 Was a chemical analysis made? Yes No	License No. 02 18 Date 6-2	3 , 19.79
DK ME		
UR-11115		

WATER WELL REPORT

INC APPRIES

STATE OF WASHINGTON

Application No.

Permit No. .

(1) OWNER: Name (b)(6)	(b)(6)	SAK
(2) LOCATION OF WELL: County YAKIMA	NE 14 SW 14 Sec 34 T /3 N. R	
		·/· W.M
caring and distance from section or subdivision corner		
(3) PROPOSED USE: Domestic Municipal D		
Irrigation Test Well Other	Formation: Describe by color, character, size of material and str show thickness of aquifers and the kind and nature of the mater stratum penetrated, with at least one entry for each change of	riai in each
(4) TYPE OF WORK: Owner's number of well (if more than one)	MATERIAL FROM	то
New well	TUP SCIL O	10
Reconditioned	COM GLEMERATE 10	2.6
(5) DIMENSIONS: 2" technology		
Diameter of well		
Drilled		
(6) CONSTRUCTION DETAILS:		
Casing installed: 2 "Diam from O n to 20 n		
Threaded [] "Diam. from ft. to ft.		
Welded 🔀 The Diam. from		
D-fA		
Perforations: Yes No No		
Type of perforation used		
perforations from ft. to ft.		1
perforations from ft. to ft.	De la	
perforations from ft. to ft.	DRINEN MELL	
Screens: Yes No &		
Manufacturer's Name		
Type Model No		
Diam. Slot size from ft. to ft. Diam. Slot size from ft. to ft.		
Diam. Slot size Hom 1. to		
Gravel packed: Yes No Size of gravel:		
Gravel placed from ft. to ft.		
Surface seal: Yes M No To what depth? ft.		
Material used in seal BENTON ITE ! CEMENT UREUT.	DECEIVED	ļ.,
Did any strata contain unusable water? Yes [] No []	NECEIVED .	1
Type of water? Depth of strata		
Method of sealing strata off	JUL 1 3 1976	
(7) PUMP: Manufacturer's Name	570107	
Туре: НР	DEPARTMENT OF ECOLOGY	
(8) WATER LEVELS: Land-surface elevation above mean sea level 100 nt.	CENTRAL RECIONAL OFFICE	
7'		
Artesian pressurelbs. per square inch Date		
Artesian water is controlled by		
(Cap, valve, etc.)		
(9) WELL TESTS: Drawdown is amount water level is lowered below static level	Work started 6-22, 19.74. Completed 6-22	1976
Was a pump test made? Yes □ No ¼ If yes, by whom?		and the same of th
Yield: O gal./min. with ft. drawdown after hrs.	WELL DRILLER'S STATEMENT:	
	This well was drilled under my jurisdiction and this	report is
	true to the best of my knowledge and belief.	
Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)	NAME JENGENS WELL DRILLING ! DRIV	11016
Time Water Level Time Water Level Time Water Level	(Person, firm, or corporation) (Type or	
	Address 1603 So 10TH AUE.	1
	Address (W)	1
Date of test	La Sylvania de la constanta de	1
Date of testBailer testgal/min. withft. drawdown afterhrs.	[Signed] (Well Doller)	
Artesian flowg.p.m. Date	7-18	71
Temperature of water 52 Was a chemical analysis made? Yes . No W	License No. 0218 Date 6-23	, 19

Ox 1716

File Original and First Copy with Department of Ecology Second Copy — Owner's Copy Third Copy — Driller's Co (b)(6)

WATER WELL REPORT

Application No.

Third Copy - Driller's Co(b)(6)	F WASHINGTON	Permit No	
(1) OWNER: Name	(b)(6) Addres	9893	36
(2) LOCATION OF WELL! County Use Line	_NE .S	W 14 Sec 34 T/3 N. R/8	
aring and distance from section or subdivision corner	- and addition	219	······ • · · · · · · · · · · · · · · ·
(3) PROPOSED USE: Domestic A Industrial Munic	eipal [(10) WELL LOG:		
Irrigation [] Test Well [] Other	Formation: Describe by color, ch	naracter, size of material and structi the kind and nature of the material	ure, an
(4) TYPE OF WORK: Owner's number of well	stratum penetrated, with at leas	it one entry for each change of for	mation
(if inote than one)	red D MATERIA		TO
	ven D	/ 2	-
Reconditioned Rotary Jets	ted D	/ 7.	_
(5) DIMENSIONS: Diameter of well Depth of completed well Depth of completed well		/	
(6) CONSTRUCTION DETAILS:		/	
Casing installed: 2 "Diam from 6 ft. to 2			
Threaded [] "Diam. from			
Welded Diam. from ft. to	n_		
Perforations: Yes No D	1		
Type of perforator used			
SIZE of perforations in. by ft. to			
perforations from ft. to	/		
perforations from ft. to	n.		
Screens: Yes No	-		
Manufacturer's Name			
Type Model No Diam Slot size from ft. to	4		
Diam. Slot size from ft. to ft.			
Consul marked	1 (105)		
Gravel placed fromft. to	1 2		
- 1/	- 17-	WED	
Surface seal: Yes No D To what depth? Material used in seal lenear Louis	PFCt	IVEU	
	No []		
Type of water? Depth of strata/	100-	3 1976	
Method of sealing strata off	125		
(7) PUMP: Manufacturer's Name	DEPARTMENT		
Туре: Н.Р	CENTION DEG	SONAL OFFICE	
(8) WATER LEVELS: Land-surface elevation APP 110	0 #		
Static level 5/1 6 500 ft. below top of well Date			
Artesian pressurelbs. per square inch Date			
Artesian water is controlled by (Cap, valve, etc.)			
(9) WELL TESTS: Drawdown is amount water level is	0.25	h = 1	
lowered below static level Was a pump test made? Yes No If yes, by whom?	Work started / 28, 19	15. Completed 7 - 28	19.25
Yield: gal./min. with ft. drawdown after	hrs. WELL DRILLER'S STA	TEMENT:	
		er my jurisdiction and this rep	port is
Decrease data (time taken as zero when numn turned off) (wroten	true to the best of my know	rieage and belief.	1 0
Recovery data (time taken as zero when pump turned off) (water measured from well top to water level)	NAME TO COMP	Well drilling of	des
Time Water Level Time Water Level Time Water L	(Person, firm, o	or corporation) (Type or print	1)
	Address 603 Lp	16 gale Gal	in
Date of test	[Signed] Olou	e tersen	•••••
Bailer testgal/min. withft. drawdown after Artesian flowg.p.m. Date	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	(Well Dittler)	D
Temperature of water	No 🗆 License No. 🔾 🔍 🐰	Date 0 - 30 , 1	19.7.5
•	•		

File Original and First Copy with Department of Ecclogy Second Copy — Owner's Copy Third Copy — Driller's Copy

WATER WELL REPORT STATE OF WASHINGTON

Application	No.	***************************************		

SIRIE OF Y	Permit No.	. /	
(1) OWNER: Name_(b)(6)	Address(b)(6)	18	
(2) LOCATION OF WELL: County YAKIMA	ME & SLQ Sec. 34 T.1		
Real g and distance from section or subdivision corner	The second secon	1000 Marin 24	-+-OW.M
	TAN THEFT TOO		
ROPOSED USE: Domestic A Industrial Municipal	(10) WELL LOG:		
Irrigation Test Well Other	Formation: Describe by color, character, size of material show thickness of aquifers and the kind and nature of stratum penetrated, with at least one entry for each c	al and structured the material change of f	cture, and al in each formation
(4) IIIE OF WORKE. (if more than one)	MATERIAL	FROM	TO
New well Method: Dug Bored Deepened Cable Driven	TOY SOIL	0	7
Reconditioned Rotary T Jetted	SILT GRVI. WATER DIRTY	7	18
	sand & grvl dirty water sil	t 18	49
(5) DIMENSIONS: Diameter of well inches.	XXXXCEMENT GRVL.	49	71
Drilled 118 ft. Depth of completed well 118 ft.	BRN CLAY & GRVL	21	75
(6) CONSTRUCTION DETAILS:	CAND & CDV	75	83
	CLAY GRVL SANDSTONE.	83	85
Casing installed: n. to n. to n.	CEMENT CRVL WATER 5-10 GPM	85	110
Threaded D "Diam. from ft. to ft.	HARD COURSE SANDSTONE WATER	110	120
Welded X	THE COURSE CHARGE THE TAX THE	1111	1111
Perforations: Yes No No No	WELL PRODUCED 25 GPM BY AIR	TFT.	
Type of perforator used	WEDE TROPOODE 27 GIN DI AIN	11.2.1.4	
SIZE of perforations in. by in.			
perforations from ft. to ft.	Well Turned into Autosian		
perforations from ft. to ft.	TOTAL TOTAL TALLO AVIETA		
perforations from ft. to ft.	2/2/87 Jakes dec.		
Screens: Yes NX X	Zon Interes		
Manufacturer's Name			
Type Model No			
Diam. Slot size from ft. to ft.			
Diam.' floor ft. to ft.			
Gravel placed fromft. toft.			
Surface seal: Yes NBENTONITE depth? 20 ft.			
Did any strata contain unusable water? Yes 🖄 No 🗌	(S) (E) (E) (E) (E) (E) (E) (E) (E) (E) (E		
Type of water? SILTY Depth of strata 49	1 1 1 7 1 a.		
Method of sealing strata off	- 1 U ₂		
(7) PUMP: Manufacturer's Name Ervenpos.	1 CCD - D 1 1		
Туре: 506. НР 3/4			
	1 - 4		
(8) WATER LEVELS: Land-surface elevation 1100 nt.	1 petroni str.		
Static level 10 ft. below top of well Date 1/27/84			
Artesian pressurelbs. per square inch Date			
Artesian water is controlled by (Cap, valve, etc.)			
(a) WELL TESTS. Drawdown is amount water level is		- 4	
(9) WELL TESTS: Drawdown is amount water level is lowered below static level	Work started 1/27/84 19 Completed 1/2	27/84	19
Was a pump lest made? Yes No If yes, by whom?		-11	
Yield: 25 gal./min. with ft. drawdown after hrs.	WELL DRILLER'S STATEMENT:		
	This well was drilled under my jurisdiction a	and this r	eport is
	true to the best of my knowledge and belief.		
Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)	PIERE WELL DETLITME (DE	דמם מו	mmon)
Time Water Level Time Water Level Time Water Level)B. BRI Type or pri	
	Address 1503 E. Nob Hill YAKIN	1A	
	and N P.)	
testgal/min, withft. drawdown afterhrs.	[Signed] (Wall Driller)	e.	
Artesian flow	(Well Duffel)	4	
Temperature of water	License No0422 Date 1/27/	/84	, 19
	XA 5/29/84		
(USE ADDITIONAL BHI			
(VOD 1000011VIII) DELI			△→ 1

File Original and Fi st Copy with Department of Ecology Second Copy — Owner's Copy Third Copy — Driller's Copy

WATER WELL REPORT STATE OF WASHINGTON

	Permit No
V	10 100
IJL,	-34 T/3 N. NY

OWNER: Name LOCATION OF WELL: County / a king Bearing and distance from section or subdivision corner (3) PROPOSED USE: Domestic | Industrial | Municipal | Irrigation Test Well Other (4) TYPE OF WORK: Owner's number of well (if more than one)..... New well Method: Dug Cable [Deepened Driven [Rotary | Jetted | Reconditioned [(5) DIMENSIONS: Diameter of well 751 * Death of completed well 7/1 (6) CONSTRUCTION DETAILS: Casing installed: 10 " Diam. from # 2 n. to 751 n" Diam. from _____ ft. to ____ ft. Welded 🗍 Perforations: Yes STAR Type of perforator used...... SIZE of perforations in. by in. 2000 perforations from 675 ft to 740 ft. perforations from ft. to ft. Screens: Yes | No 2 Manufacturer's Name..... Type...... Model No...... Diam. Slot size from ft. to ft. Diam. Slot size from Gravel packed: Yes | No | Size of gravel: Gravel placed from ... Surface seal: Yes No D To what depth? SO f n. Material used in seal Bentungte-Cerry 14 J Did any strata contain unusable water? Yes Type of water?..... Depth of strata..... Method of sealing strata off..... (7) PUMP: Manufacturer's Name..... (8) WATER LEVELS: Land-surface elevation above mean sea level.... Static level FLOW ft. below top of well Date 5 Artesian pressure 9 lbs. per square inch Date 5/5/ Artesian water is controlled by..... Drawdown is amount water level is lowered below static level (9) WELL TESTS: Was a pump test made? Yes No I I yes, by whom CASSEL ft. drawdown after gal./min. with 700t Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level) Water Level | Time Water Level |

.....ft. drawdown after.....

Artesian flow LIOO g.p.m. Date 5/5/1/2
Temperature of water. Was a chemical analysis made? Yes No

Bailer test.....gal/min. with.....

_		FAITON	
	(10) WELL LOG:		K
	Formation: Describe by color, characte show thickness of aquifers and the kin stratum penetrated, with at least one	id and nature of the materi	ai in each
	MATERIAL	FROM	TO
	TUP SOIL WISO	mr gravel 0	10
	CONGIOMITATE, 61	6/Clau 10	150
	SAND & Graveliel	clay silt 150	170
	CLAY, Candy, W/A	take1 120	340
	SANOY CLOG, TON, 5	16.6786	
	5TATIC 401	34	255
	conglemerate,	w/qketh	
	c'Lay lenges	355	360
	conglomerateis	anda	
	Tun algebra	360	577
	CLOY, Sandy tan	6/44 377	390
	CLOY, TUN; SANG	Jular. 390	400
	CLAN TUN SLT S	andi woo	415
	CLAN, STICKE ,TO	an 415	400
	Clarific uldray	el 405	438

TO Brown, CUGALES

Egravel, Coalso

1 Claun-water

retate, chay, tan

naise-fine, water

WELL DRILLER'S STATEMENT:

STONE ICHGOS

gravel- water

CLAY, SGHUG

Sand, fine - course, sand

conflumerate, leown

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Cassel well Drilling (Person, firm, or corporation) (Type or)	g print)
Address 1308 Woelher the Va	hma
[Signed] avustune	
	1.4

License No. 0.0.23 Date 5/5 19.1 mI-1182

460

460

470

510

515

600

504

704

465 470

File Original and First Copy with Department of Ecology Second Copy — Owner's Copy Third Copy — Driller's Copy

WATER WELL REPORT

Application No.

STATE OF WASHINGTON

7	 ,	_	-	_	 _	-	•	-	•	~

Permit No.

(1) OWNER: Name (0)(0)	(D)(O)	48142	
OCATION OF WELL: County V. u. h. i m. u.		7/33, R/P	W.M.
Bearing and distance from section or subdivision corner			
(3) PROPOSED USE: Domestic D Industrial D Municipal	(10) WELL LOG:	6	
	Formation: Describe by color, character, size of me show thickness of aquifers and the kind and natur stratum penetrated, with at least one entry for each character.	iterial and structus e of the material is sch change of form	re, and in each nation.
(4) TYPE OF WORK: Owner's number of well (if more than one)	MATERIAL		TO
New well Method: Dug Bored [Deepened Cable Driven [- 1 7a. /	0	2_
Reconditioned [Rotary D Jetted [
(5) DIMENSIONS: Diameter of well inches	GOLVE!	7 25	
Dellied M. Depth of completed well f		251 5	
(A) CONCERNION DEMANS 6.	ON VOT A TOV		<u> </u>
(6) CONSTRUCTION DETAILS:	(/eV	4-	90
Casing installed: 6 "Diam from + 1 ft. to 5 9 ft Threaded [] "Diam from ft. to 5 ft			
Welded Diam. from ft. to ft	/********	80 9	42
Perforations: Yes No P	-		
Perforations: Yes No to			
SIZE of perforations in. by in	···		
perforations from ft. to ft.	1		
perforations from ft. to ft. to ft.			
	-		
Screens: Yes No D			
Type Model No	1		
Diam Slot size from ft. to ft	1		
Diam. Slot size from ft. to ft	<u> </u>		
Gravel packed: Yes No D Size of gravel:			
Gravel placed from ft. to ft		-	
Surface seal: Yes No To what depth?			
Material used in scal Bentinite	property is		
Did any strata contain unusable water? Yes No [I V T S = S S S S S S S S S S S S S S S S S		
Type of water? Depth of strata Method of sealing strata off	196		
/#\ DITAM	NUV - 5 1981		
(7) PUMP: Manufacturer's Name HP	17/12		
	1620		
(8) WATER LEVELS: Land-surface elevation above mean sea level ft.	- C		
Static level 8 ft. below top of well Date 9/27/5/	<u> </u>		
Artesian pressure	<u> </u>		
(Cap, valve, etc.)	.		
(9) WELL TESTS: Drawdown is amount water level is lowered below static level	Work started 9/28 195/ Completed	9/10	20
Was a pump test made? Yes No If yes, by whom? Quit Jufa-		-15-3-5	227.
Yield: 2 3 gal./min. with ft. drawdown after hrs.			
	This well was drilled under my jurisdicti true to the best of my knowledge and belie	on and this report.	ort is
Recovery data (time taken as zero when pump turned off) (water level			
measured from well top to water level) Time Water Level Time Water Level Time Water Level	NAME POULIN Drillin	y	
77461 2600	(Person, firm, or corporation)	(Type or print)	
	Address K. 2 3 13 0 X 3 3 5	G	
	m. 0.		
Date of test	[Signed] Com (Well Driller)	Lel	•••••
Artesian flow		100	. 13
Temperature of water	License No. 0.35.7 Date 7/	10 11	9.0./.
	50 11-9-81		
TICE ADDITIONAL S	SUPERCY TE NECESCARVI / [

File Origins and First Copy with Department of E. ology Second Copy — Owner's Copy Third Copy — Driller's Copy

WATER WELL REPORT

STATE OF WASHINGTON

Permit No

(b)(6)	(b)(6)		
	Address		Vake
LOCATION OF WELL: County Yakima	_ 3 E 1 NW 1 Sec. 34 TI	3 N. R.	18' WM
carrie and distance from section or subdivision corner			
(3) PROPOSED USE: Domestic Mindustrial Municipal	(10) WELL LOG:		
Irrigation Test Well Other	Formation: Describe by color, character, size of materi	al and str	icture, an
(A) THE OF THORY Owner's surplus of well	show thickness of aquifers and the kind and nature of stratum penetrated, with at least one entry for each	the mater change of	ial in eac
(4) TYPE OF WORK: Owner's number of well (if more than one)	MATERIAL	FROM	TO
New well A Method: Dug Bored Deepened Cable Driven	Light Brown Dirt	0'	2'
Reconditioned Rotary Jetted		-	
(5) DIMENSIONS: Diameter of well 6 inches.	light Brown Dirt (Hard)	2	28
Diameter of well . D inches.	0 0:4	SV	120
	I Sun Det	24	7
(6) CONSTRUCTION DETAILS:	Brand Pit & Sand (some water	121	20
Casing installed: 6 "Diam from On to 75 n.	Deam (St.) man (Suce Cales	1 -	27
Threaded Diam. from	Rowing Did & Grand	24'	40'
Welded 1 th. to ft.	1371242 10121 2 1 1 2 2 2		
Perforations: Yes D No X	Brown Clay & Sad	40'	60'
Type of perforator used			
SIZE of perforations	Grave 2 Sand (Agustus)	60'	75'
perforations from ft. to ft.			
perforations from ft. to ft.		-	
Screens: Yes No No			
Manufacturer's Name			
Type Model No Diam Slot size from ft. to ft.			
Diam. Slot size from ft. to ft.			
Canal analysis			
Gravel placed from ft. to ft.	Dra		
	- AECEN	-	
Surface seal: Yes No D To what depth? 20 n.		40	
Material used in seal SenToniTe	AUG 3		
Type of water? Depth of strata	. 000	7	
Method of sealing strata off	CENTAL MENT OF		
(7) PUMP: Manufacturer's Name	CENTRAL REGIONAL DE	OGY	
_ Type: H.P	TAL OF	FICE	
(8) WATER LEVELS: Land-surface elevation			
above mean sea level			P-80-7-1
Static level			
Artesian water is controlled by(Cap, valve, etc.)		-	
		-	1
(9) WELL TESTS: Drawdown is amount water level is lowered below static level	Work started 7 /15/, 1927 Completed 7	121	1,127
Was a pump test made? Yes No M If yes, by whom?	WELL DRILLER'S STATEMENT:	, ,	
Yield: gal./min. with ft. drawdown after hrs.			
# 1 # H	This well was drilled under my jurisdiction a true to the best of my knowledge and belief.	ind this i	report is
Recovery data (time taken as zero when pump turned off) (water level			
measured from well top to water level) Time Water Level Time Water Level Time Water Level	NAME King Well Orilling	Dame of T	dnt)
		Type or pr	O'C
· · · · · · · · · · · · · · · · · · ·	AddressRt 2 Bx 2374 Waret	W	18851
Para dand	04.1 100		
Date of test Bailer test 20 gal/min, with 25 ft, drawdown after hrs.	[Signed] Takuck 9 7 (Well Driller)		
Artesian flow	2026	1201	.~~
Temperature of water Was a chemical analysis made? Yes No 🗹	License No. 0026 Date 7	~ M	., 19

WATER WELL REPORT STATE OF WASHINGTON

Application No

Permit No .

(1)	OWNER: Name (b)(6)	Address	
	LOCATION OF WELL: County Yakima		18
Bear	ing and distance from section or subdivision corner	— O.K.S 34 24 27 2 X 2 X 2 X 2 X 2 X	W.M.
(3)	PROPOSED USE: Domestic P Industrial Municipal	(10) WELL LOG:	E
(3)	Irrigation Test Well Other		ructure and
	4	Formation: Describe by color, character, size of material and st. show thickness of aquifers and the kind and nature of the mate stratum penetrated, with at least one entry for each change of	rial in each formation.
(4)	TYPE OF WORK: Owner's number of well (if more than one)	MATERIAL FROM	ТО
	New well Method: Dug Bored Deepened Cable Driven	501/	12
	Reconditioned Rotary Jetted		-
(5)	DIMENSIONS: Diameter of well	Sund + 6-uvel 12	34
(0)	Drilled 34 n Depth or completed well 30		
			- 4 -
(6)	CONSTRUCTION DETAILS:		
	Casing installed: 6 "Diam from 7 n to 30 n		
	Threaded " Diam. from		
	Perforations: Yes No P		
	Type of perforator used		
	perforations from ft. to ft.		
	perforations from		1
	perforations from	TANE OF LIVE	
	Screens: Yes No No		
	Manufacturer's Name Model No	11/21 MAX 2 4 1982	
-	Diam. Slot size from . ft. to ft.	Man Paris	
	Diam Slot size from ft. to ft.	1100	
	Gravel packed: Yes No Size of gravel.	Del S	
	Gravel placed from		
	Surface seal: Yes No D To what depth? 2.3		-
	Material used in seal Bentinite		
	Did any strata contain unusable water? Yes 🗆 No 🕒		
	Type of water? Depth of strata		
	Method of sealing strata off		
(7)	PUMP: Manufacturer's Name		
	Туре: НР		
, ,	WATER LEVELS: Land-surface elevation above mean sea level		
	level 20 ft. below top of well Date 3/5/5/		
Artes	ian pressurelbs. per square inch Date		
	(Cap, valve, etc.)		
(9)	WELL TESTS: Drawdown is amount water level is lowered below static level	- du 11-15/-	
Was :	pump test made? Yes No If yes, by whom? are Self	Work started 19 5/ 5	1824
Yield		WELL DRILLER'S STATEMENT:	
-		This well was drilled under my jurisdiction and this true to the best of my knowledge and belief.	report is
	very data (time taken as zero when pump turned off) (water level	the to the best of my knowledge and benef.	
711	leasured from well top to water level)	NAME POULIN Drilling	
Tin	water Level Time Water Level Time Water Level	(Person, firm, or corporation) (Type or p	print)
		Address R. /. 3 BOX 3356	
•		81 11	
	ate of test	[Signed]	
	r testgal/min. withft. drawdown afterhrs.	(Well Driller)	
	erature of water Was a chemical analysis made? Yes : No :	License No. 792 Date 5/6	, 1984
	. Pon .	· / m I	, 02
	Harman and the second s	My J. n	5-0-

WATER WELL REPORT STATE OF WASHINGTON

Application No.

Permit	No.			

(1) OWNER: Name(b)(6)	Address		
(2) LOCATION OF WELL: County Yakina	- N'W N C 1 Sec 34 T 13	N P]	8
ing and distance from section or subdivision corner 320'	See attached C-2	N., R.	
(3) PROPOSED USE: Domestic Municipal Municipal	(10) WELL LOG:		
Irrigation Test Well Other		and struc	ture, and
	Formation: Describe by color, character, size of material show thickness of aquifers and the kind and nature of the stratum penetrated, with at least one entry for each ch	ie materia ange of fi	il in each
(4) TYPE OF WORK: Owner's number of well (if more than one) 1	MATERIAL	FROM	то
New well Method: Dug Bored Deepened Cable Driven	TOP SOIL (FINE SILTI)	0	12
Reconditioned Rotary X Jetted	cement gravel (sur.water)	12	18
	Dec. Rock, Bldrs. Sand Gravel	18	38
(5) DIMENSIONS: Diameter of well inches.	Dec. Rock & Bldrs.	38	114
(5) DIMENSIONS: Diameter of well 6 inches. Drilled ft. Depth of completed well 117 ft.	Dec. Rock, Sand, Gravel Water	114	117
(6) CONSTRUCTION DETAILS:			
Casing installed: 0 " Diam from IUI n. to n.	Well Produced in excess of 50 GPM	8110.	
Threaded "Diam. from 10 ft. to 98 ft. Welded 5 "Diam. from 30" ft. to 98 ft.	Static Water Level +30"		
Perforations: Yes No	Casing all told inc. shoe 101' new	+ wal	1
Type of perforator used	Casing all total lies back let ac-	4	
SIZE of perforations in. by in.	Cemented to 38' clay above that		
perforations from ft. to ft.	0	1	
perforations from ft. to ft.			
perforations fromft. toft.			
Screens: Yes No			
Manufacturer's Name			
Type Model No		-	
Diam Slot size from ft. to ft.			
Diam. Slot size from ft. to ft.			
Gravel packed: Yes No Size of gravel.			
Gravel placed from ft. to ft.			
Surface seal: Yes No To what depth 38 rt. Material used in seal CEMENT & HENTONITE rt.			
Material used in seal			
Did any strata contain unusable water? Yes No Type of water? SUTIACE Depth of strata			
Method of sealing strate of Case & cememted			
(7) PUMP: Manufacturer's Name Seare			
Type: Shallow will HP 2			
(8) WATER LEVELS: Land-surface elevation above mean sea level 1030			
Static level +30 ft. below top of well Date 10-19-73			
Artesian pressureIbs. per square inch Date			
Artesian water is controlled by (Cap, valve, etc.)			
(9) WELL TESTS: Drawdown is amount water level is	10-18-73	0.72	
Was a pump test made? Yes No If yes, by whom?	Work started 10-18-73 , 19 Completed 10-1	7-13	, 19
Yield: gal./min. with ft. drawdown after hrs.	WELL DRILLER'S STATEMENT.		
	This well was drilled under my jurisdiction an	d this r	enort is
	true to the best of my knowledge and belief.	id this re	sport is
Recovery data (time taken as zero when pump turned off) (water level			
measured from well top to water level) Time Water Level Time Water Level Time Water Level	NAME Riebe Well Drilling, 1503 E.		
Time Water Level Time Water Level Time Water Level		pe or pris	at)
	Address Yakima, Washington		
	0000		
Late of test	[Signed] Skn C. Grelo		
er test gal/min. with ft. drawdown after hrs.	(Well Driller)		
Artesian flow g.p.m. Date	License No 3601 Date 10-26	- 73	10
Temperature of water	License No JOJI Date Date		10
121			
8. F. No. 7356—08—(Rev. 5-69)—5-69.	mets if necessary)		

File Original and l'Irst Copy with Department of Ecology Second Copy — Owner's Copy Third Copy — Driller's Copy

WATER WELL REPORT STATE OF WASHINGTON

Application No.

Permit No .

No.	P	1
10.	U	
<u> </u>	-I	

(1) OWNER: Name Calvary Cemetery	Address 1405 S. 24th Ave. Yakima WA	98902
LOCATION OF WELL: County YAKIMA	_ SW ₁₄ SE _{14 Sec.} 26 _T 13 _N	R 18Ewm
Bearing and distance from section or subdivision corner		
(3) PROPOSED USE: Domestic & Industrial Municipal	(10) WELL LOG:	
Irrigation Test Well Other	Formation: Describe by color, character, size of material and show thickness of aquifers and the kind and nature of the m stratum penetrated, with at least one entry for each change	aterial in eact
(4) TYPE OF WORK: Owner's number of well (if more than one)	MATERIAL FRO	
New well XX Method: Dug	Clay, brown, moist	0 20
Reconditioned Rotary T Jetted		
(5) DIMENSIONS: Diameter of well 8 inches	Cemented sand & gravel w/water 2	20 : 132
Drilled 132 of Depth of completed well		
(6) CONSTRUCTION DETAILS:		
Casing installed: 8 "Diam from 0 n to 89 n		
Threaded		
Perforations: Yes No No	NOTE: Abandonded hole with	
Type of perforation used	two yards of cement and	
perforations from ft. to ft.	<u>hentonite</u>	
perforations fromft. toft.		
perforations from		
Screens: Yes No 🛭		
Manufacturer's Name	"	
Diam. Slot size from ft. to ft.		
Diam. Slot size from ft. to ft.		
Gravel packed: Yes No XX Size of gravel:		
Gravel placed fromft. toft.		
Surface seal: Yes & No D To what depth?18	NO PVC Liner Installed	
Material used in seal bentonite		
Did any strata contain unusable water? Yes [] NoVQ	8* Drive shoe utilized	
Type of water?		
	MEGENVEN	
(7) PUMP: Manufacturer's Name		
	10 007 0 1 1000	
(8) WATER LEVELS: Land-surface elevation above mean sea level	// 1 OCI / 1 800	
Static level 20 ft. below top of well Date 9/21/86 Artesian pressure lbs. per square inch Date		
Artesian water is controlled by (Cap, valve, etc.)	CENTRAL REGION OF PICE	1
(Cap, valve, etc.)	C DESTROY REGION OF SIZE	
(9) WELL TESTS: Drawdown is amount water level is lowered below static level	Work started 9/20 19 86. Completed 9/21	19 86
Was a pump test made? Yes [] No [] If yes, by whom?		The state of the s
Yield: 100+ gal./min. with ft. drawdown after hrs.	WELL DRILLER'S STATEMENT:	
ESTIMATED AIRLIFT PRIOR TO ABANDONMENT	This well was drilled under my jurisdiction and t true to the best of my knowledge and belief.	his report is
Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)		
measured from well top to water level) Time Water Level Time Water Level Time Water Level	NAME PONDEROSA DRILLING & DEVELOPMEN	
Time water bever 1 time water bever 1 time water bever		or print)
	Address E, 6010 Broadway, Spokane WA	99212
Date of testhrshrs.	[Signed] W. Joseph Close Ir (Sell Driller)	•••••
Artesian flowg.p.m. Date	w. bobeph close of.	0.0
Temperature of water Was a chemical analysis made? Yes [] No []	License No 1040	, 19.86.

File Original and First Copy with Department of Ecology Second Copy — Owner's Copy Third Copy — Driller's Copy

WATER WELL REPORT STATE OF WASHINGTON

Application No.

Permit No

0

(A) OWNER: Name Calvary Cemetery	Address 1405 S. 24th Ave., Yakima	WA 98	902
LOCATION OF WELL: County YAKIMA	SW 1/4 SE 1/4 Sec 26 T 1	3 N	18E w
Bearing and distance from section or subdivision corner			
(3) PROPOSED USE: Domestic & Industrial [] Municipal []	(10) WELL LOG:		
Irrigation Test Well Other	Formation: Describe by color, character, size of materia show thickness of aquifers and the kind and nature of stratum penetrated, with at least one entry for each c	il and stru the materi	cture, and in each
(4) TYPE OF WORK: Owner's number of well 2	MATERIAL	FROM	TO
New well M Method: Dug Bored Deepened Cable Driven Reconditioned Rotary J Jetted	Clay, brown, moist	0	20
	Cemented sand & gravel w/cobble		:
(5) DIMENSIONS: Diameter of well 10 inches.	w/water	20	135
(6) CONSTRUCTION DETAILS:	Shale, soft	135	_160
Casing installed: 10 "Diam from +1 n to 55 n		-	
Threaded 8 " Diam. from +1 n. to 175 n. Welded 20 "Diam. from 168 n. to 170 n.	Shale, broken w/clay & sandstone	160	170
Welded ₩ Diam. from 108 ft. to ft.	w/water	160	170
Perforations: Yes No No No Type of perforator used	Shale, medium hard	170	180
SIZE of perforations in. by in.	Shale, broken w/clay & sandstone		
perforations from	_w/water	180	190
perforations from ft. to ft.			
Canada	Shale, broken w/sand w/water	190	205
Screens: Yes XX No D Manufacturer's NameJohnson			
Type stainless steel Model No.			
Diam. 7 Slot size 20 from 170 ft. to 180 ft. Diam. 7 Slot size 10 from 180 ft. to 190 ft.			
Diam. 1 Slot size 10 from 100 ft. to 130 ft.	No PWC Liner installed		
Gravel packed: Yes No K Size of gravel:	10" Drive shoe utilized		
Gravel placed from ft. to ft.	8" Drive shoe utilized	1	
Surface seal: Yes No To what depth?18 n.			
Material used in seal bentonite			
Did any strata contain unusable water? Yes No.X. Type of water?			
Method of sealing strata off	550BMBB		
(7) PUMP: Manufacturer's Name	MEGENARILI		
Type:HP	IUX GITE		
(8) WATER LEVELS: Land-surface elevation above mean sea level	- IV OCT 2 1 1996		
Static level 20 ft. below top of well Date 9/30/86			
Artesian pressurelbs. per square inch Date	DEPARTMENT OF ECOLOGY		_
Artesian water is controlled by(Cap, valve, etc.)	CENTRAL REGION SELICA		
		1	
lowered below static level	Work started 9/23 , 19.86 Completed 9/	/30	, 1986
Was a pump test made? Yes □ No ☑ If yes, by whom?	WELL DRILLER'S STATEMENT:		
" ESTIMATED AIRLIFT " "	This well was drilled under my jurisdiction as	nd this v	enort i
7.67	true to the best of my knowledge and belief.	nd this i	eport 1
Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)			
Time Water Level Time Water Level Time Water Level	NAMEPONDEROSADRILLING6DEVELOPM (Person, firm, or corporation) (T)	ENT. IN	
	Address E. 6010 Broadway, Spokane	WA 99	212
	THE COS OF THE PARTY AND THE P	.0634.2.	.H.66
Date of test	[Signed] // /leve //a		
Bailer testgal./min. withft. drawdown afterhrs.	W. Joseph Close Jr. (West Driller)		
Artesian flowg.p.m. Date	License No 1040 Date 9/30		1986

THE ADDRESS OF STREET OF SPECIAL SEC.

ile Original and First Copy with lepartment of Ecology second Copy — Owner's Copy Third Copy — Driller's Copy

WATER WELL REPORT

STATE OF WASHINGTON

Application No

Permit	No -	

(1)	OWNER: Name (b)(6)	(b)(6)
(2)		st Valley area), SW 1 seSW 726 N13 18 M
	ing and distance from section or subdivision corner	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
(3)	PROPOSED USE: Domestic Industrial Municipal	(10) WELL LOG:
(-)	Irrigation Test Well Other	Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each
(4)	TYPE OF WORK. Owner's number of well	show thickness of aquifers and the kind and nature of the material in each stratum penctrated, with at least one entry for each change of formation.
(4)	TYPE OF WORK: Owner's number of well (if more than one)	MATERIAL FROM TO
	Deepened	Top_soilbrnM 0 4
	Reconditioned Rotary Jetted	VEry Large boulders blk VVH / 16
(5)	DIMENSIONS: Diameter of well inches.	Very Large boulders blk VVH 6 17 Boulders gravel clay VH 17 21
	Drilled 57 n. Depth of completed well. 57 n.	Boulders gravel clay VH 17 21 Boulders gravel sand H to VH 21 40
(6)	CONSTRUCTION DETAILS:	Bullers gravel same a to VH 40 57
(0)	Casing installed: 8" Diam from +2 n to 57 n.	
,	Threaded \(\text{ \text{ \text{Diam. from } \text{ \text{ \text{Tom } \text{ \text{ \text{ \text{T}} \text{ \text{ \text{T}} \text{ \text{ \text{T}} \text{ \text{ \text{ \text{ \text{T}} \text{ \text{ \text{ \text{T}} \text{ \text{ \text{T}} \text{ \text{ \text{T}} \text{ \	
	Welded D Diam. from ft. to ft.	
	Perforations: Yes No	
	Type of perforator used	
	SIZE of perforations in. by in.	
	perforations from	
	perforations from ft. to ft.	
	Screens: Yes No C	
	Manufacturer's Name	
	Type Model No	
	Diam. Slot size from ft. to ft.	
•		
	Gravel placed from ft. to ft.	
	Surface seal: Yes No D To what depth? 20 n.	
	Material used in seal	
	Type of water? Depth of strata	
	Method of sealing strata off.	
(7)	PUMP: Manufacturer's Name	
	Туре: Н.Р	
(8)	WATER LEVELS: Land-surface elevation above mean sea level	
Static	level 24 6 "ft. below top of well Date	
Artes	ian pressureIbs. per square inch Date	
	Artesian water is controlled by	
(9)	WELL TESTS: Drawdown is amount water level is	
` '	lowered below static level	Work started 2-17-85, 19 Completed 2-20-85, 19
Yield		WELL DRILLER'S STATEMENT:
-		This well was drilled under my jurisdiction and this report is
- 10		true to the best of my knowledge and belief.
Recov	very data (time taken as zero when pump turned off) (water level	NAME Riebe Well Drilling
Tim	water Level Time Water Level Time Water Level	(Person, firm, or corporation) (Type or print)
		Address Nob Hill Blvd.
.		10 0.
	ate of test	[Signed] John A Tiese
	testgal/min. withft. drawdown afterhrs.	(Well Driller)
	erature of water	License No. 0422 Date 2/25/85, 19

Second Copy - Owner & Copy	ELL REPORT Application WASHINGTON Permit No.	No :	/
(b)(6)	(b)(6)	1	1//
		i'ma	Wat
(2) LOCATION OF WELL: County Hake	7/ / J 21/2 / SKY 1 5 2 2 7 T/	J.N., R.	18 WM
PROPOSED USE: Domestic of Industrial Municipal			
Irrigation Test Well Other	Formation: Describe by color, character, size of materia show thickness of aquifers and the kind and nature of stratum penetrated, with at least one entry for each continuous c	the moteri	al des sank
(4) TYPE OF WORK: Owner's number of well / (if more than one)	MATERIAL	FROM	TO
New well Method: Dug Dored C	7.08418	0	4
Deepened ☐ Cable ☐ Driven ☐ Reconditioned ☐ Rotary ☑ Jetted ☐	, ,		1
(E) DIMENSIONS.	Hardson & graveldage	4	34
(5) DIMENSIONS: Diameter of well inches Drilled 65 ft Depth of completed well 65 ft		3.7	
Difficulty Depth of Completes well and the second	Sandstone Allay Layers	24	51
(6) CONSTRUCTION DETAILS:	to the outer Voy		
Casing instance. The plan from n. to 40 11	Contraction Wassers	1	
Threaded Tiam. from ft. to ft	CHILDE III AI.	51	15
Welded Diam. from ft. to ft		-3.7	413
Perforations: Yes No Yo			
Type of perforator used			
SIZE of perforations in. by in to ft. to ft.			
perforations from ft. to ft			
perforations from ft. to ft		-	
Screens: Yes No X		1	
Manufacturer's Name			
Type Model No			
Diam. Slot size from ft. to ft. Diam. Slot size from ft. to ft.	1		
Gravel packed: Yes No Size of gravel:			
Gravel placed fromft. toft.			
Surface seal: Yes No D To what depth? 38 ft.			
Material used in seal Bostonuc			
Did any strata contain unusable water? Yes No No Type of water?		11- 1	1
Method of sealing strata off	P. t., 5 E	· 1-1	1
(7) PUMP: Manufacturer's Name	1.50		
Type:HP	1.12 E	-11	
	F-7		
(8) WATER LEVELS: Land-surface elevation above mean sea level	C Ut	L. 1	
Static levelft. below top of well Date	78.00-1-0.1 0.1		
Artesian water is controlled by			
(Cap, valve, etc.)			
(9) WELL TESTS: Drawdown is amount water level is lowered below static level	74_ 11 - 74	-11	711
Was a pump test made? Yes No If yes, by whom?	Work started 1 19 1. Completed 0.1		., 19/-7
Yield: gal./min. with ft. drawdown after hrs.	WELL DRILLER'S STATEMENT:		
" Pumped welk Wir "	This well was drilled under my jurisdiction a	nd this r	eport is
Danner det (Area Arter en mar Phon Duran Arrend ett) (m.A., Juni)	true to the best of my knowledge and belief.	,	2
Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)	NAME COESTAGO OFFILM	in W	nc
Time Water Level Time Water Level Time Water Level	NAME (Person, firm, or corporation) (T	yp or pri	int)
	Addres 9202 River Rd Unker	ria 111	m
	An A A A L	- 1	
Pate of test	[Signed Mister Massin	hors	
testgal/min, withft. drawdown afterhrs.	(Well Driller)	. نواد کاماد کاما	
Temperature of water	License No. 01/2 Date 29-	11	1074
was a chemical analysis mader 163 [] No []	Date Troise	/(, 18.5

File Original and First Copy with Department of Ecology Second Copy — Owner's Copy Third Copy — Driller's Copy

WATER WELL REPORT

Application No

STATE OF WASHINGTON

Permit No.

(1) OWNER: Name (D)(O)		Yakima
LOCATION OF WELL: County	Yakima NI % S.	
Bearing and distance from section or subdivision corner		
(3) PROPOSED USE: Domestic Industrial Municipal	(10) WELL LOG:	
Irrigation Test Well Other	show thickness of aquifers and th	practer, size of material and structure, one kind and nature of the material in each change of formations.
(4) TYPE OF WORK: Owner's number of well (if more than one)	MATERIAL	
New well 🖺 Method: Dug 🗍 Bored Deepened 🗍 Cable 🗎 Driven	TODSOLI	0 6
Reconditioned Rotary V Jetted		sandstone 6 132
(5) DIMENSIONS: Diameter of well 6 inche	Condonana Caretan	
Drilled 140 ft. Depth of completed well 140		
(6) CONSTRUCTION DETAILS:	1	
Casing installed:6 Diam. from+1 ft. to119_ f		
Threaded Diam. from		
Welded ₩ '' Diam. from ft. to f	<u>R.</u>	
Perforations: Yes 🗆 No 🖔		
Type of perforator used		
SIZE of perforationsin. byin. byin. byin. byin. byin. ft. toin.		
perforations from ft. to f	n.	
perforations from ft. to f	nt.	
Screens: Yes No E		
Manufacturer's Name		
Type Model No		
Diam. Slot size from ft. to f		
Complemental.		
Gravel placed fromft. tof		
	_	
Surface seal: Yes No D To what depth? 20+	t.	
Material used in seal Bentonite Did any strata contain unusable water? Yes No 1		
Type of water? Depth of strata		
Method of sealing strata off	Tale (als IIV	15:11/1
7) PUMP: Manufacturer's Name	111111111111111111111111111111111111111	3 111
Type: HP.	11/2	113
R) WATER I EVELS. Land-surface elevation	APR - 7 198	0 1111
above mean sea leveltt		U
atic level 56 ft. below top of well Date 10/28/8	THE R. P. LEWIS CO., LANSING, MICH. 49-140-140-140-140-140-140-140-140-140-140	O OGY
Artesian water is controlled by	CENTRAL MEGION C	SERICE
(Cap, valve, etc.)	_	
Drawdown is amount water level is lowered below static level	Work started 10/24/65	10/28/85
as a pump test made? Yes 🔂 No 🗷 If yes, by whom?		Completed, 19
eld: gal./min. with ft. drawdown after hrs	WELL DRILLER'S STAT	TINEIMET
	This well was drilled unde true to the best of my knowl	r my jurisdiction and this report
ecovery data (time taken as zero when pump turned off) (water level		cuae and benen.
measured from well top to water level)	NAME Vernon L. Rank	
Time Water Level Time Water Level Time Water Level	(Person, firm, or	corporation) (Type or print)
	Address. 5503. Abtanum Pd	Yakima, Wa. 98903
		0 0 1
Date of test	[Simed] //011	L. Clank
aler test. 75 gal/min, with ft. drawdown after hrs.		(Well Drüler)
mperature of water	License No. 0854	Date 10/30/85 19

econd Copy - D iner's Copy	WELL REPORT OF WASHINGTON Application N Permit No		-
(1) OWNER: Name City of Yakima			
2) LOCATION OF WELL: County Yakima			0
and distance from section or subdivision corner N. 500	W 320' from SE cor. SW\SW\\	и., и_	W.W.
3) PROPOSED USE: Domestic Industrial Municipal	(10) MELL LOC.		
Irrigation [5] Test Well [Other	Formation: Describe by color, character, size of material show thickness of aquifers and the kind and nature of t stratum penetrated, with at least one entry for each ch	and struc he materia	ture, and
(4) TYPE OF WORK: Owner's number of well (if more than one)	MATERIAL	FROM	TO
New well (1) Method: Dug [] Bored	top soil tan	0	3
Deepened ☐ Cable ② Drive Reconditioned ☐ Rotary ☐ Jetter	- I Considerate error to houldone fire	a 3	73
	gravel & sand med. soft	73	60
(5) DIMENSIONS: Diameter of well 8 inc Drilled 332 ft. Depth of completed well 352	her Sand gray loose med, to fine	80	82
Drilled 532 ft. Depth of completed well 522	75.5	82	100
1) CONSTRUCTION DETAILS	Sandstone with gravel & silt Ked a		106
Casing installed: 12 - Diam. from 0 ft. to 50	Congiomerate this mode	1061	115
Thresded \(\text{\tince{\text{\tin\tint{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}\tint{\text{\text{\text{\text{\text{\text{\tin}\tinin}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tinit}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}}}\tint{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tin}\tint{\text{\tinit}\text{\text{\text{\tini}}\tint{\text{\text{\ti}\tint{\text{\text{\text{\tinc{\tinc{\tiin}\tiint{\text{\t	OFF V TIREU	115	129
Welded T Tiam. from ft. to	gravely sand silt brown s		145
	tan nard	145	147
Perforations: Yes & No star	Date of France	f 147	202
Type of perforator used Sudi Size of perforations in by 11	coarse tan he vy silt	202	215
	- CLAV BRING B. FIRVET BOIL	215	219
2400 perforations from 245 ft. to 350	tan firm gravel & sand-clay interbe		241
perforations from ft. to	tan hard	241	246
Screens: Yes No.	tan firm-narrow soft strat	- 1 -	262
Manufacturer's Name	Clev ten with small gravel & sind	10.4	271
Type Model No	China shed well among sind atla	MAPLIE	
Diam. Slot size from ft. to	light brown-good water	10 - 271	280
Diam. Slot size from ft. to	Clay-ton-some gravel-sand soft	280	286
Gravel packed: Yes No 20 Size of gravel:	Conglomerate tan (312ht) med. fir		305
'Gravel placed from rt. to	Connacted send-smell gravel ten		
Surface seal: Yes X No D To what depth? 55		305	312
Material med in seal Neat cement	Compant gravel-cond-heaver silt		
	tan (weter)	312	324
Type of water? Depth of strata	Compact send-coarse-brown(water)	324	351
Method of sealing strata off	Clay with sand-tight	331	332
7) PUMP: Manufacturer's Name Tait Type: Verticle Turbine HP 60	<u></u>		
	Kajor equaters at 271ft to 280ft		
8) WATER LEVELS: Land-surface elevation 1765 above mean sea level 1765 tatic level 18 rt. below top of well Date 9/26/7	a 305ft to 331ft		
rtestan pressure fbs. per square inch Date	Other noticable lesser empfers		
Artesian water is controlled by (Cap, valve, etc.)	Soft to Aset longt to locet		
9) WELL TESTS: Drawdown is amount water level is lowered below static level	Work started 7/16 1973 Completed 9/	lances 26	19.73
Tas a pump test made? Yes 10 No If yes, by whom cosseens	WELL DRILLER'S STATEMENT:		
Text. Ood Seed about 17 and Od		mal Alla	
<u>- 500 </u>	This well was drilled under my jurisdiction a true to the best of my knowledge and belief.	na this r	eport is
ecovery data (time taken as zero when pump turned off) (water le	rvel		
ecovery data (time taken as zero when pump turned off) (water le measured from well top to water level) Time Water Level Time Water Level Time Water Level Time Water Level Time Time Water Level Time Water Time Time Water Time Time	TOTAL STATE OF THE PROPERTY OF	ype or pri	nt)
2:00 80 2:01 30 2:05 25	1308 Voeller Valine Wn 00	3002	

remperature of water 53 Was a chemical analysis made? es 🛛 No 🖂

gal/min, with.

(Well Driller) License No. 0075 Date 9/28/75 19

[Signed].....

WATER WELL REPORT

Application No.

(b)(6)	of Washington	Permit No
(1) OWNER: Name	(b)(6)	Gabine, Wash.
LOCATION OF WELL: County		
and distance from section or subdivision corne	38	
(3) PROPOSED USE: Domestic X Industrial D Munic	tipal [] (10) WELL LOG:	1
Irrigation Test Well Other		naracter, size of material and structure, an the kind and nature of the material in eac
(4) TYPE OF WORK: Owner's number of well	stratum penetrated, with at leas	the king and nature of the material in each it one entry for each change of formation
(if more than one)	MATERIA	
	ven D - Jago Au	(0 10
Reconditioned Rotary Jet	ted []	10 58
(5) DIMENSIONS: Diameter of well 5. Depth of completed well 5.8	nches.	
(6) CONSTRUCTION DETAILS:		
Casing installed: J " Diam. from O n to 26"	W"	
Threaded Diam. from ft. to		
Welded "Diam. from ft. to		W
Perforations: Yes No		
Type of perforator used		
SIZE of perforations in. by	1 1	
perforations from ft. to perforations ft. to perfor	1	
perforations from ft. to		
Screens: Yes No No		
Manufacturer's Name	100	el/a e a
Type Model No		
Diam Slot size from ft. to	V	ar a
	1.3	<u></u>
Gravel placed from ft. to		F x
	13	
Surface seal: Yes No To what depth? 18	n. /3	\$
Material used in seal		
Type of water? Depth of strata		NISIWI -
Method of sealing strata off	IIV)	
(7) PUMP: Manufacturer's Name	MAR 2 100	1: 11
Type: H.P.	10/11/2/190	11 23 2 2
(8) WATER LEVELS: Land-surface elevation of 110 above mean sea level.		-
Static level 7 4 ft. below top of well Date 2 - 12	-81	
Artesian pressure	(1400)	
Artesian water is controlled by(Cap, valve, etc.)		
(9) WELL TESTS: Drawdown is amount water level is		
Was a pump test made? Yes No If yes, by whom?	Work started 19	81 Completed 2 - 12, 19.81
Yield: 20 gal/min. with ft. drawdown after	hrs. WELL DRILLER'S STAT	rement:
"Will air."	This well was drilled unde	er my jurisdiction and this report is
	true to the best of my know	ledge and belief.
Recovery data (time taken as zero when pump turned off) (water measured from well top to water level) Time Water Level Time	NAME JENSENS WEL	L DRILLING + DRIVING recorporation) (Type or print)
	Address 1603 So.10?	AVE YAKIMA, WASH
	2012	1
of test	[Signed] Kus B.	yours de!
Baller testgal/min. withft. drawdown after Artesian flowg.p.m. Date		(Well Driller)
Temperature of water 0.6 Was a chemical analysis made? Yes 🗆 1	No X License No. 0 2 7	Date 3 - /2, 108/

APPENDIX C

RESULTS OF SEPTIC TANK/DRAIN FIELD SYSTEM SOIL AND WATER CHARACTERIZATION STUDY

OFFICIAL USE ONLY UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE WESTERN REGION

Yakima Agricultural Research Laboratory 3706 West Nob Hill Boulevard Yakima, Washington 98902

REPORT OF RESIDUE ANALYSIS

PCY-83-9

Project

Machinery Washing Pad. USDA/ARS - Septic tank and

ura mage areas.

Date

July 29, 1983

Sample

Soil and water

Chlorinated hydrocarbon and Organophosphate

pesticides

Origin

: J. E. Halfhill

USDA, ARS

3706 W. Nob Hill Boulevard

Yakima, WA 98902

Analyst

; Jay C. Maitlen

Supervisor

L. M. McDonough 😤 📉 📉

SUMMARY

Samples of soil and water were taken from areas associated with an equipment washing pad, located on the premises of the USDA, ARS, Yakima Agricultural Research Laboratory, 3706 W. Nob Hill Blvd., Yakima, WA. Samples included water taken from the septic tank associated with the wash pad, and soil taken from the connected drain field and from an area near and below the level of the drain field. The samples were analyzed for residues of the following chlorinated hydrocarbon pesticides: aldrin, BHC, DDT-op¹, DDT-pp¹, TDE, dieldrin, 2,4-D, endrin, heptachlor, heptachlor epoxide, lindane and methoxychlor and for residues of the following organophosphate pesticides: demeton and its metabolites, fensulfothion and its metabolites, Guthion, oxydemetonmethyl and its metabolites, parathion and paraoxon.

Of the samples analyzed, only the soil sample from the drain field was found to contain possible pesticide residues. This sample contained apparent residues of 0.05 ppm of Lindane and 0.10 ppm of DDT-pp'. No detectable residues (<0.05 ppm) of the other above listed chlorinated

hydrocarbon or organophosphate pesticides were found in this sample.

The water sample from the septic tank and the soil sample from near and below the level of the drain field contained no detectable residues (<0.05 ppm) of any of the above listed chlorinated hydrocarbon or organophosphate pesticides.

NOT FOR PUBLICATION WITHOUT PRIOR APPROVAL OF THE AGRICULTURAL RESEARCH SERVICE, OR FOR USE IN SALES PROMOTION OR ADVERTISING WHICH EXPRESSES OR IMPLIES ENDORSEMENT OF THE PRODUCT BY THE ADMINISTRATION OR THE U.S. DEPARTMENT OF AGRICULTURE.

SAMPLE DESCRIPTION AND SAMPLING PROCEDURE

On March 3, 1983 samples of soil and water were taken from the septic tank, the drain field and the adjacent drainage area that was associated with an equipment wash down pad located at the USDA, ARS, Yakima Agricultural Research Laboratory, 3706 W. Nob Hill Boulevard, Yakima, WA. The soil samples were 6 inch diameter cores taken from below the soil surface and the water samples was dipped from the septic tank. The samples taken were as follows:

Sample ***	Laboratory Analytical No.	Sample description
C-4	4684 4701∻¹	Soil - Non-contaminated control sample
B-1	4686 4702*	Soil - From drain field associated with wash pad from the 2 ft. level.
B-2	4681 4703*	Soil - From near and below the level of the wash pad drain field at the 6.5 ft. level.
W-1	4695 4700∻	Water - Non-contaminated control sample
W-2	4688 4704∻	Water - From the septic tank associated with the wash pad.

¹ Numbers marked with an asterisk were analyzed for organophosphate pesticide residues, all others were analyzed for chlorinated hydrocarbon pesticide residues.

ANALYTICAL PROCEDURES

The previously described samples were analyzed for residues of the following chlorinated hydrocarbon pesticides: aldrin, BHC (benzenehexachloride), DDT-op', DDT-pp', TDE (metabolite of DDT), dieldrin, 2,4-D, endrin, heptachlor, heptachlor epoxide, lindane and methoxychlor. Similar samples were analyzed for residues of the following organophosphate pesticides: demeton and its metabolites, fensulfothion and its metabolites, Guthion, oxydemetonmethyl and its metabolites, parathion and paraoxon. The pesticide residue extraction, cleanup and GLC analysis procedures are described in the following pages of this report.

Extraction Procedures:

Soil-chlorinated hydrocarbon residues: Fifty (50) grams of each sample were weighed into a 500 mL Erlenmeyer® flask, 150 mL of a 2-1 solvent mixture of hexane and isopropyl alcohol added and the solution was then shaken of a wrist-action shaker for 1 hour. The extract solution was then filtered through a fluted filter paper into a 250 mL separatory funnel. The solution in the separatory funnel was then extracted 4 times each with 100 mL of water to remove the isopropyl alcohol. The hexane solution was then filtered through a funnel plugged with cotton overlaid with anhydrous sodium sulfate (Na_2SO_4) into a bottle and the resultant extract was stored in a refrigerator until analyzed.

Soil-organophosphate residues. Fifty (50) grams of each soil sample was weighed into a quart Warning® blendor jar, 200 mL of dichloromethane (MeCl $_2$) added and the solution then blended for 4 min. at high speed. The extract solution was filtered through a fluted filter paper into a 250 mL separatory funnel. The solution in the separatory funnel was then slowly filtered through a funnel plugged with cotton overlaid with Na $_2$ SO $_2$ into a bottle and the extract stored in a refrigerator until analyzed.

Water-chlorinated hydrocarbon residues: Fifty (50) grams of the water sample was weighed into a 500 mL Erlenmeyer flask, 100 mL of hexane added and the solution then shaken for 1 hour on a wrist-action shaker. The extract solution was then poured into a 250 mL separatory funnel and the lower water layer was drawn off and discarded. The hexane was then filtered through a funnel plugged with cotton overlaid with Na_2SO_4 into a bottle and stored in a refrigerator until analyzed.

Water-organophosphate residues: Fifty (50) grams of the water sample was weighed into a 500 mL Erlenmeyer flask, 100 mL of MeCl $_2$ added and then the solution was shaken on a wrist-action shaker for 1 hour. The extract solution was then poured into a 250 mL separatory funnel and the lower MeCl $_2$ layer was slowly filtered in the same manner as the soil extract above. The filtered extract was collected in a bottle and stored in a refrigerator until analyzed.

Cleanup Procedures:

Soil and water-chlorinated hydrocarbon residues: A 10 mL portion of each soil and water extract solution (equivalent to 5 g of sample) was measured into separate 50 mL Erlenmeyer flasks and evaporated to dryness in a 45°C water bath with the aid of a gently stream of air. The resultant residue was dissolved in 5 mL of hexane, the flask stoppered and the solution stored in a refrigerator until column chromatography cleanup. A glass chromatograph column, 10 mm i.d. by 45 cm was packed from bottom to top with a plug of cotton, 1/2 inch of Na_2SO_4 , 3.0 g of silica gel and a plug of cotton. The silica gel was Bakers 5-3405 analyzed reagent grade (60-200 mesh) that had been heated overnight in a 120°C oven and then deactivated by adding 2.0% water (w/w) and then tumbling in an end-over-end manner for 1 hour. This stock silica gel was then stored in a refrigerator in a sealed glass contained until needed. Prior to column chromatography cleanup, the sample solutions were removed from the refrigerator, allowed to warm to room temperature and then transferred on to the chromatography

column with 20 mL of hexane. After this solution was absorbed into the top of the column, the column wall was rinsed down with 1 mL of hexane. After this solution was absorbed into the top of the column an additional 30 mL of hexane was added and allowed to pass through the column. The collected solution from these steps of the chromatography was called fraction 1 and contains residues of aldrin, DDT-op', DDT-pp', TDE, heptachlor and lindane (40%). The collection flask was changed and 40 mL of a solvent mixture of 2.0% ethyl ether and 98.0% hexane was added. The collected solution from this step was called fraction 2 and contained residues of BHC (50%), dieldrin, heptachlor epoxide, endrin, methoxychlor and lindane (60%). The collection flask was again changed and 40 mL of solvent mixture of 5.0% ethyl ether and 95.0% hexane was added. The collected solution from this elution was called fraction 3 and contained residues of 2,4-0 methyl ever and BHC (50%). The collected fractions were evaporated to dryness in the 45°C water bath, transferred to 8 mL glass vials with MeCl₂, evaporated to dryness again and the resultant residue dissolved in 1 mL of nano-grade hexane and stored in a refrigerator until analysis by gas chromatography.

Soil and water-Organophosphate residues: A 40 mL aliquot (equivalent to 20 g of sample) of each sample extract was measured into a 50 mL Erlenmeyer flask, evaporated to dryness in the water bath and then transferred to an 8 mL glass vial with MeCl₂. This solution was then evaporated to dryness in the water bath, the resultant residue dissolved in 1 mL of a 1-1 mixture of acetone and hexane and then stored in a refrigerator until analyzed. These samples required no further cleanup prior to analysis.

GLC Quantitation of Residues:

Soil and water-Chlorinated hydrocarbon residues: Residues of the aforementioned chlorinated hydrocarbon pesticides in the soil and water samples were quantitated with a Hewlett Packard Model 5840A gas chromatograph (GLC) equipped with a Nickel-63® electron capture detector. The GLC column was 4.0 mm i.d. by 51 cm, glass, packed with Gas Chrom Q (81/100 mesh) coated with a 1-1 mixture of 3% OV-17 and 3% QF-1 and operated isothermaly at 185°C. The carrier gas was a mixture of 5% methane and 95% argon and the flow rate was 80 mL/min.

The retention times (Rt) in minutes for the chlorinated hydrocarbon pesticides evaluated are shown in Table 1. Also, Figures 1 through 3 are sample chromatograms which show the GLC retention times of these compounds.

Soil and water-Organophosphate residues: Residues of the previously listed organophosphate pesticides in soil and water were quantitated with a Hewlett Packard Model 5840A gas chromatograph (GLC) equipped with a flame photometric detector fitted with a filter for the detection of phosphorous compounds. The glass GLC column was 4.0 mm by 61 cm and was packed with Ultra Bond Carbowax 20M + 2% 0V 101 (80/100 mesh). The carrier gas was nitrogen and the flow rate was 75 mL per minute. The column oven temperature was programed from 140 to 220°C (rate 10°/min.) for the evaluation of residues of these organophosphate pesticides. Figure 4 is a sample chromatogram which shows the GLC retention times of the organophosphate pesticides involved in this work.

CONTROLS AND RECOVERIES

Controls: Non-contaminated soil and water samples were analyzed to determine if there were any compounds in these samples that would produce GLC peaks with the same retention times as the pesticides being evaluated. No interfering peaks were detected. Figures 5 through 10 demonstrate GLC chromatograms of the various liquid chromatography fractions of non-contaminated soil and water as determined by the analytical procedures used for the detection of the chlorinated hydrocarbon pesticides. Since there were no peaks found in the GLC chromatograms of the control samples of water and soil analyzed for organophosphate pesticide residues, no figures of the chromatograms are shown.

Recoveries. To determine the efficiency of the analytical procedures, control samples of soil and water were fortified with known amounts of pure chlorinated hydrocarbon and organophosphate pesticides prior to extraction and the percent recovery determined. Table 2 shows the recoveries found.

RESULTS AND DISCUSSION

Chlorinated hydrocarbon pesticide residues: As demonstrated, only soil sample B-I was found to contain possible detectable residues of any of the aforementioned chlorinated hydrocarbon pesticides. This sample was taken from the drain field of the equipment washing pad and contained apparent residues of 0.05 ppm of Lindane and 0.10 ppm of DDT,pp'. This sample contained no detectable residues (<0.05 ppm) of the remaining previously listed chlorinated hydrocarbon pesticides.

The water sample (W-2) taken from the septic tank associated with the wash pad and the soil sample (B-2) taken from an area near and below the level of the drain field of the wash pad, contained no detectable residues (<0.05 ppm) of the previously listed chlorinated hydrocarbon pesticides. Although results in Table 1 and in Figures 14 and 15 show GLC peaks with retention times characteristic of lindane residues for the soil sample B-2, it is felt that this sample contained no residues of this compound. As demonstrated by results in Table 1 and by the GLC chromatogram Figures 1 and 2, the retention time of lindane is 0.72 min. and the ratio of the peaks in the liquid chromatographic fractions 1 and 2 is 40-60 (%). In sample B-2, the retention time of the two peaks relative to lindane was 0.79 and 0.75, but the ratio of the residues found in the liquid chromatographic fractions 1 and 2 was about 10-90 (%). Therefore this residue was considered not to be lindane.

Organophosphate pesticide residues: For the most part, organophosphate pesticides rapidly degrade in the environment in 10 to 120 days. Therefore, the soil and water samples were analyzed only for residues of the organophosphate pesticides used on the laboratory premises in the past year. As demonstrated in Figures 20 through 22 there were no detectable residues (<0.05 ppm) of the previously listed organophosphate pesticides found in soil samples B-1 and B-2 or in the water sample, W-2.

ACKNOWLEDGEMENT

We wish to thank Ms. Lisa Saxe of this laboratory for her assistance in the extraction, cleanup and analysis of these samples.

cc:

A. K. Burditt, Jr. J. E. Halfhill

Table 1. The GLC retention times (min.) and the liquid chromatographic fraction in which peaks were found relative to pure standards of chlorinated hydrocarbon pesticides and samples of soil and water taken from an equipment wasning site.

	Liquid	chromatographic fra	iction'
Sample	Fraction 1	Fraction 2	Fraction 3
Pure	chlorinated hydroc	arbon standards	
Heptachlor	0.89^{2}	N3	N
Lindane	0.72(40%)4	J. 72(45%)	i _Y
Aldrin	1.10	N	N
DDT-op'	3.91	N	N
TDE	4.32	N	N
DDT-pp'	5.27	N	N
ВНС	N	1.01(50%)	1.01(50%
Heptachlor epoxide	N	1.75	N
Dieldrin	N	2.79	N
Endrin	N	3.45	N
Methoxychlor	N	10.97	N
2,4-D methyl ester	N	N	0.46
	Soil and Water	Samples	
Soil- (C-4)	N	2.13	1.41
Control-4684			
Water-(W-1)	N	1.19	N
Control-4695			
Soil-(B-1)	0.79(40%)	0.75(60%)	1.36
Drain field- 4686	5.25	2.14	
	7.72	5.17	
	10.67		
Soil-(B-2)	0.79(10%)	0.75(90%)	4.27
Near and below		4.05	7.00
drain field level-4681			
Water-(W-2)	N	2.91	0.70
Septic tank - 4688			

This designates the liquid chromatographic fraction in which the GLC peaks were found.

This number is the GLC retention time in minutes.

N designates that there were no GLC peaks found.

⁴ The percent values in parenthesis designates the amount of the total compound found in each liquid chromatographic fraction.

Table 2. Recoveries of chlorinated hydrocarbon and organophosphate pesticides from control samples of soil and water that were fortified with the pure compounds prior to extraction.

	Ppm	Recovery	found (%)
Pesticide added	added	soil	water
Chlar	nated hydrocarbo	on pesticides	
Aldrin	0.1	79.0	97.8
BHC	0.1	114.0	105.0
DDT-op'	0.1	96.0	107.0
DDT-pp'	0.1	98.0	108.0
2,4-D methyl ester	0.1	118.0	110.0
Dieldrin	0.1	106.0	111.0
Endrin	0.1	99.0	110.0
Heptachlor	0.1	134.0	135.0
Heptachlor epoxide	0.1	111.0	114.0
Lindane	0.1	130.0	113.0
Methoxychlor	0.1	131.0	100.0
TDE	0.1	98.0	97.0
<u>0r</u>	ganophosphate pe	esticides	
Demeton thiono	0.1	101.0	86.0
Demeton thiol	0.1	106.0	91.0
Demeton thiol sulfoxide	0.1	101.0	87.0
Fensulfothion & combined motabolites (sulfone, oxygen anolog, oxygen	0.1(each)	99.0	94.0
anolog sulfone)			44.4
Guthion	0.1	110.0	98.0
0xydemetonmethy1	0.1	107.0	96.0
Oxydemetonmethyl sulfone	0.1	113.0	86.0
Parathion	0.1	101.0	92.0
Paraoxon	0.1	94.0	87.0

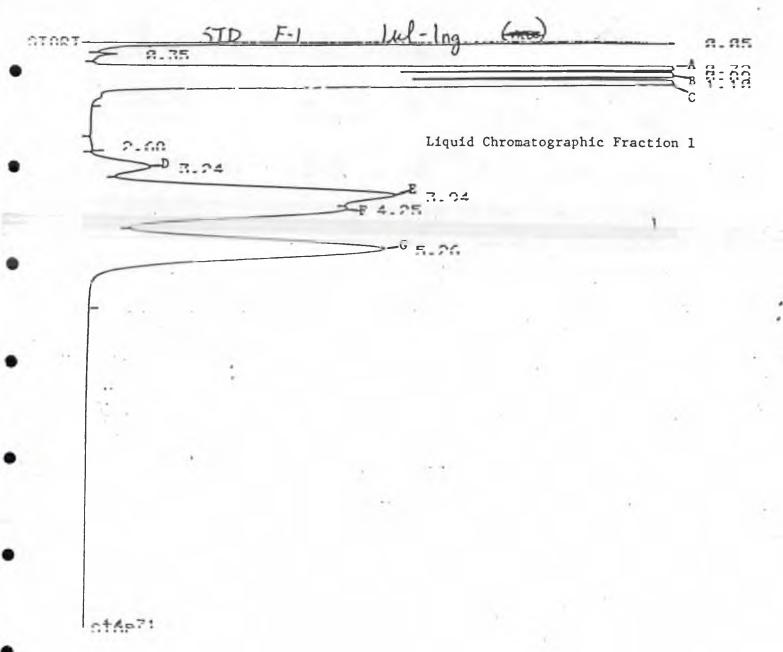


Figure 1. GLC chromatograms of 1.0ng each of pure standards of lindane (A), heptachlor (B), aldrin (C), DDE op' (E), TDE (F), and DDT pp' (G). Peak D is from an impurity found in the TDE standard.

DITH 24 G (new) STD 2,32 . 10 Liquid chromatographic fraction 2 5.20

Figure 2. GLC chromatograms of 1.0ng each of pure standards of lindane (A),
BHC (B), heptachlor epoxide (C), dieldrin (D), endrin (E), and methoxychlor (F).

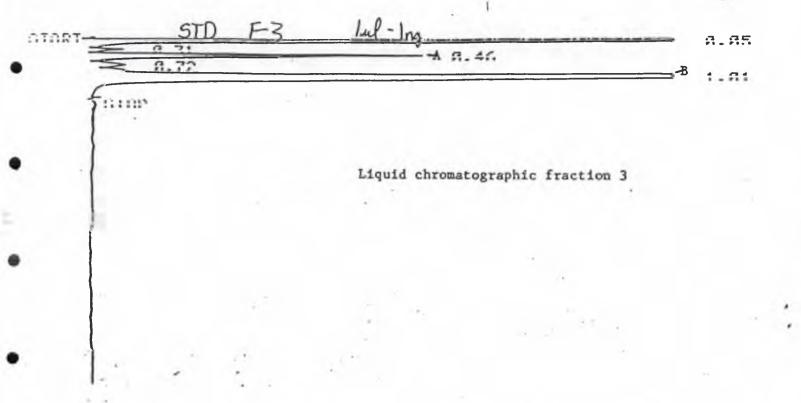


Figure 3. GLC chromatograms of 1.0 ng each of pure standards of 2,4-D methyl ester (A) and BHC (B).

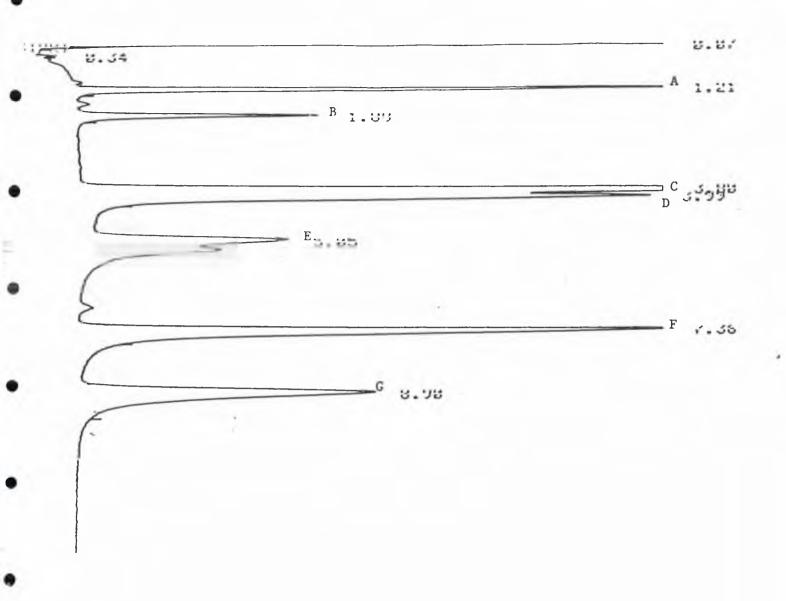


Figure 4. GLC chromatogram of 5.0ng each of pure standards of demeton thiono (A), demeton thiol (B), paraoxon (C), parathion (D), demeton thiol sulfoxide (E), fensulfothion and its combined metabolites of sulfone, oxygen anolog and oxygen anolog sulfone (F), and Guthion (G).

Figure 5. GLC chromatogram of a control sample of soil as analyzed for the determination of chlorinated hydrocarbon pesticides.

0.44

STOR4-OS

Figure 6. GLC chromatogram of a control sample of soil as analyzed for the determination of chlorinated hydrocarbon pesticides.

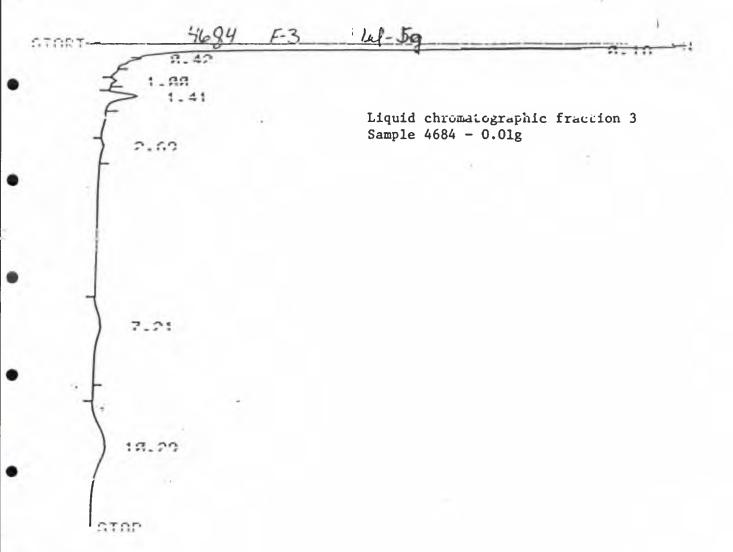


Figure 7. GLC chromatogram of a control samples of soil as analyzed for the determination of chlorinated hydrocarbon pesticides.

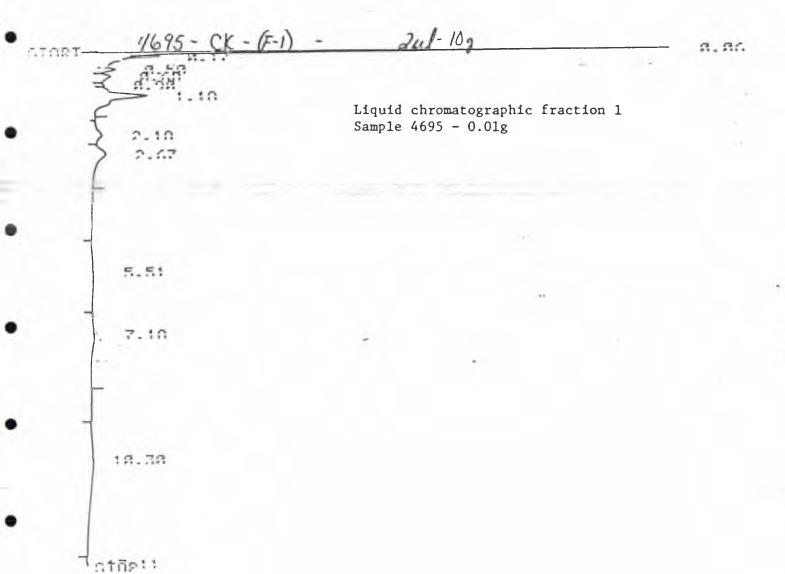


Figure 8. GLC chromatogram of a control sample of water as analyzed for the determination of chlorinated hydrocarbon pesticides.

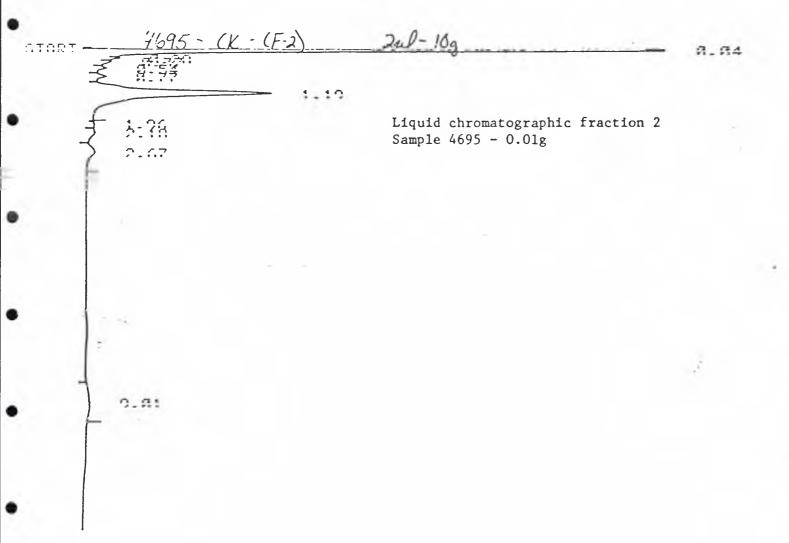


Figure 9. GLC chromatogram of a control sample of water as analyzed for the determination of chlorinated hydrocarbon pesticides.

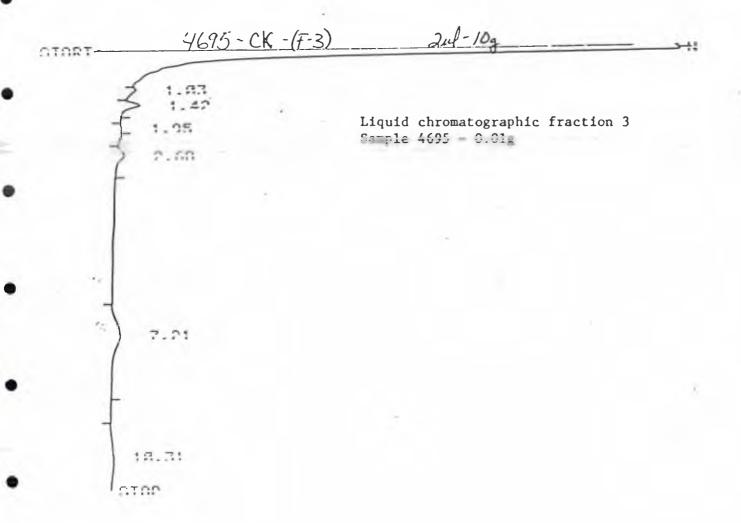


Figure 10. GLC chromatogram of a control sample of water as analyzed for the determination of chlorinated hydrocarbon pesticides.

Figure 11. GLC chromatogram of soil sample B-l as analyzed for the determination of chlorinated hydrocarbon pesticides.

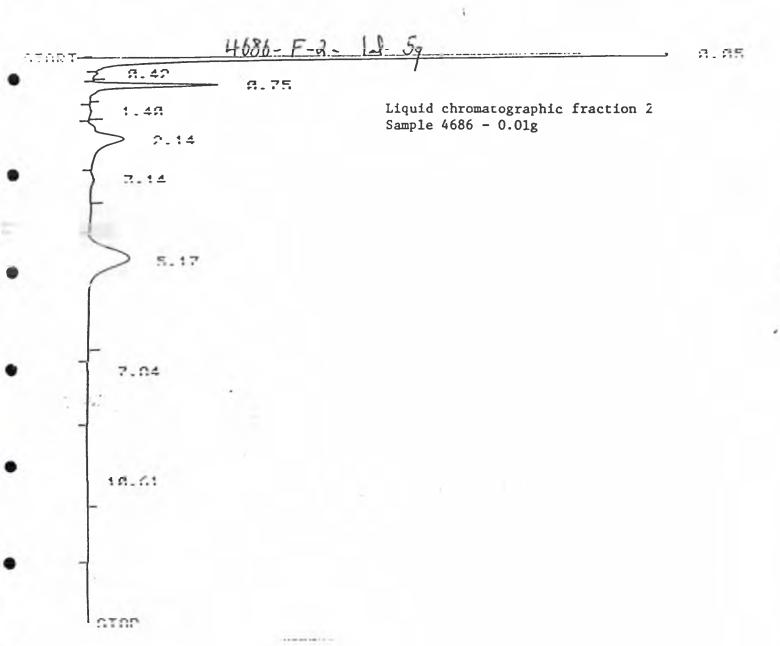


Figure 12. GLC chromatogram of soil sample B-1 as analyzed for the determination of chlorinated hydrocarbon pesticides.

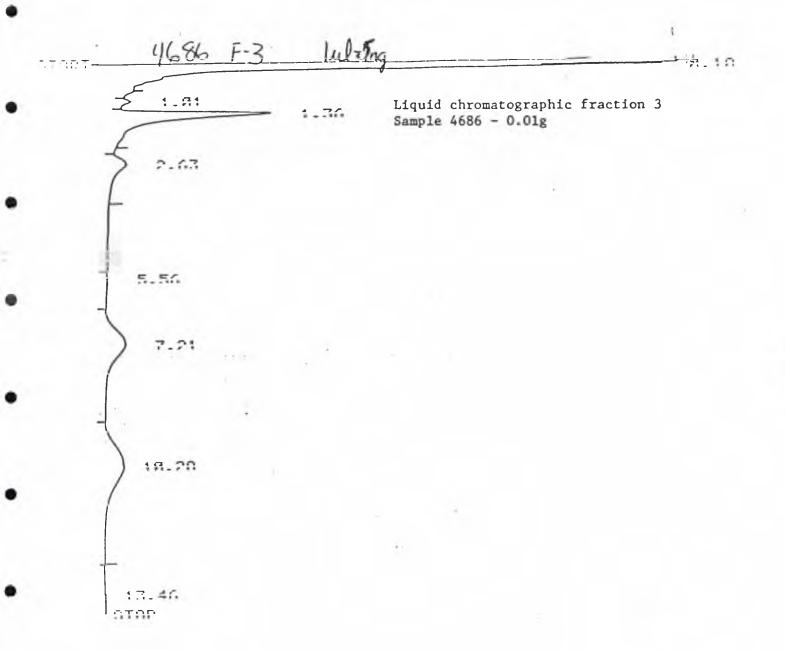


Figure 13. GLC chromatogram of soil sample B-1 as analyzed for the determination of chlorinated hydrocarbon pesticides.

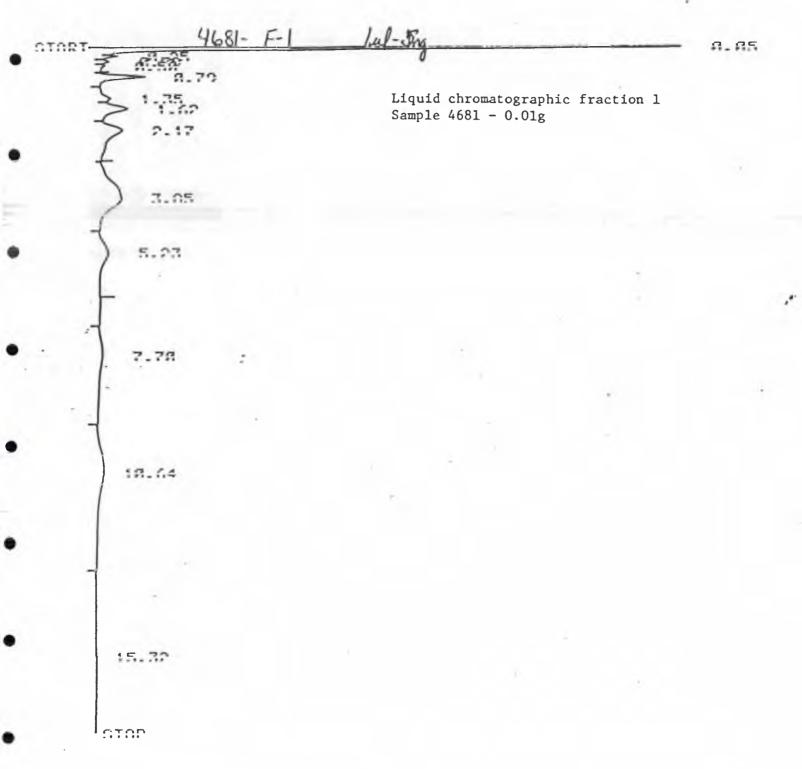


Figure 14. GLC chromatogram of soil sample B-2 as analyzed for the determination of chlorinated hydrocarbon pesticides.

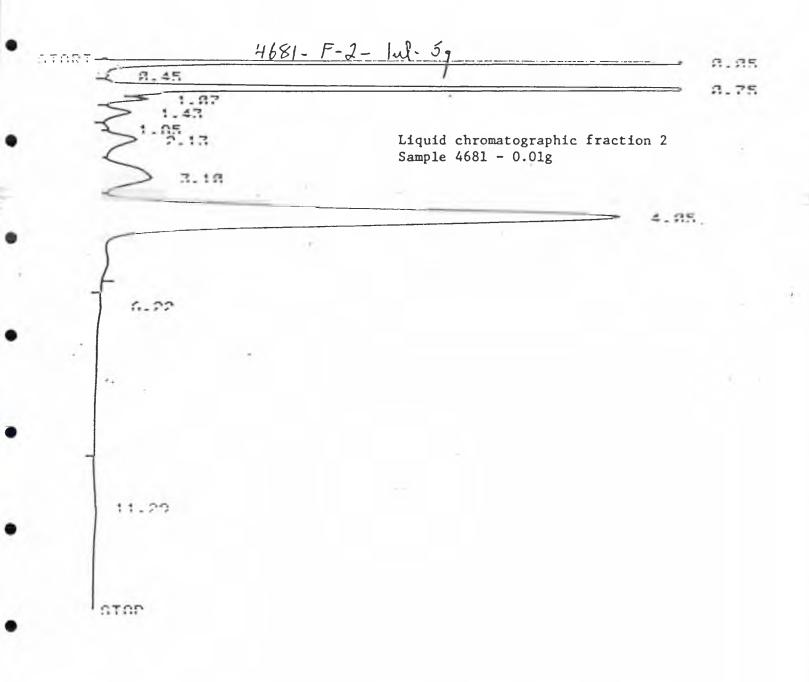


Figure 15. GLC chromatogram of soil sample B-2 as analyzed for the determination of chlorinated hydrocarbon pesticides.

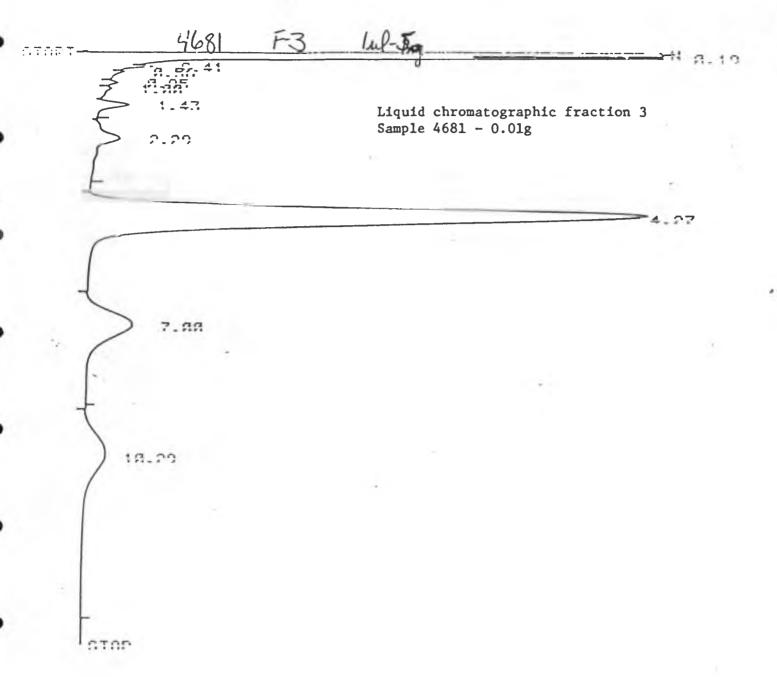


Figure 16. GLC chromatogram of soil sample B-2 as analyzed for the determination of chlorinated hydrocarbon pesticides.

Figure 17. GLC chromatogram of water sample W-2 as analyzed for the determination of chlorinated hydrocarbon pesticides.

Figure 18. GLC chromatogram of water sample W-2 as analyzed for the determination of chlorinated hydrocarbon pesticides.

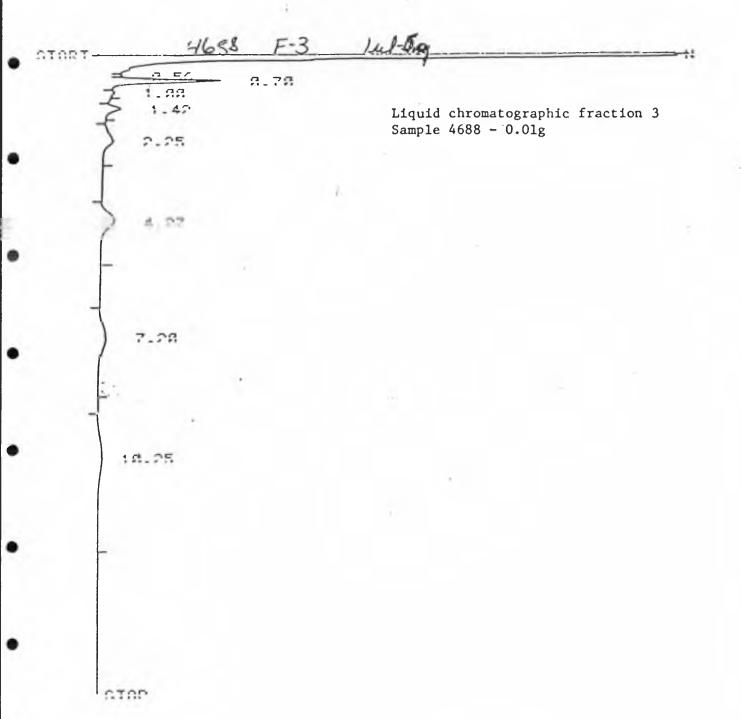


Figure 19. GLC chromatogram of water sample W-2 as analyzed for the determination of chlorinated hydrocarbon pesticides.

4702-52 (1009)

25 - 255

Sample 4702 0.10g

Figure 20. GLC chromatogram of soil sample B-l as analyzed for the determination of organophosphate pesticides.

Sample 4703 0.10g

Figure 21. GLC chromatogram of soil sample B-2 as analyzed for the determination of organophosphate pesticides.

147011- Sul (100g) U. 154

Sample 4704 0.10g

SINY

Figure 22. GLC chromatogram of water sample W-2 as analyzed for the determination of organophosphate pesticides.

APPENDIX D

AND WATER COLLECTED BY WASHINGTON DEPARTMENT OF ECOLOGY





STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

Mail Stop PV-11 • Olympia, Washington 98504 • (206) 753-2800

TO:

Merley McCall

FROM:

D. Huntamer, Chemiston - 125

SUBJECT:

Organic Analyses of Dept. of Agriculture

DAM TOWN HAP

Research Station Samples; Yakima, WA

DATE:

April 19, 1983

Four samples were received at the EPA Region 10 Laboratory from WDOE Olympia on March 24, 1983 for analyses of polynuclear aromatic hydrocarbons (PAH) and pesticides. The results of th PAH analyses are attached. Pesticides results will be sent when completed. Note that a number of pesticides were seen in the tentatively identified compound list.

EPA #	WDOE #	
12589	None	Septic Tank - water
12590		Drainfield 26" from surface
12591		Drainfield 5 ft. from surface
12592	- 1	Hole #2 5.5 ft.



PROJECT: Makima / WDOE LABORATORY! EPA RESIGN X	COMPILED BY: <u>AN BlazenichDATE</u> : 4-18-5 REVIEWED BY: <u>1788</u> : DATE: 4-18-8
SAMPLE # :	12589 125901259 1 12592
UNITS :	mall in Kernal Kornal Ko
L0Q : .	
1. acenaphthene	5u 2u 2u 2a
2. benzidine	304 254 254 254
3. 1,2,4-trichlorobenzene	54 24 24 2M
4. hexachlorobenzene	1 44 (16) 4u
5. hexachloroethane	24 24 24
6. bis(2-chloroethyl) ether	
7. 2-chloronapthalene	
8. 1,2-dichlorobenzenė	
9. 1,3-dichlorobenzene	
0. 1,4-dichlorobenzene	
1. 3,3'-dichlorobenzidine	V 164 1/24 1/24
2. 2,4-dinitrotoluene	114 124 124 124
	11 a lau lau lau
4. 1,2-diphenylhydrazine	54 24 2n 2n
(as/aZobenzene) 5. fluroanthene	84 1 1 T4)
6. 4-chlorophenyl phenyl ether	
	87.6% 71.2% 76.8% Solids

PRO	JECT: Makima / WDUE COM ORATORY EPA Region X REV	PILED I	3Y : ()	nB	legen	uh	DATE:	4-	18-
LAB	ORATORY EPA REgion X REV	IEWED I	3Y:	W	30		DATE:	7-1	8-8
			1			1	1	111	
	SAMPLE # :	12589	12590	1259)	12592				
•	UNITS :	ug/l	ug/K	un/K	ug/K				
	L0Q :		,		. ,				4
17.	4-bromophenyl phenyl ether	84	24	241	24				
18.	bis(2-chloroisopropyl) ether	54	1	1			1		1
19.	bis(2-chloroethoxy) methane	\downarrow	1	V	V				
20.	hexachlorobutadiene	84	44	4.0	44				
21.	hexachlorocyclopentadiene	30 u	304	30u		1			
22.	isophorone	5u	24	6,2	24				-
23.	napthalene	350	18.8	124	24	-			
24.	nitrobenzene	5 M	211	V	1				
25.	N-nitrosodimethylamine	_	-	_	_				
26.	N-nitrosodiphenylamine	5 u	44	44	44				
27.	N-nitrosodi-n-propylamine	V	1	1	1				
28.		1260	290	(90)	(40)				
29.	butyl benzyl phthalate	311	(1)	24	24				
30.	di-n-butyl phthalate	1	25)	(Î4)	1			2.1	
31.	di-n-octyl phthalate		2:	24					
32.	diethyl phthalate		2.14	CANA.	1				
33.			1			2			-
	dimethyl phthalate	1				- 1			
14.	benzo(a)anthracene	1							-
35.	benzo(a)pyrene					•			
36.	3,4-benzofluroanthene								-
37.	benzo(k)fluoranthene chrysene		1,	1,			-1		

BASE/NEUTRAL COMPOUNDS (continued)

PROJECT: Makima WDOF COMPILED BY: An Blazerich DATE: 4-18-83
LABORATORY: EPA REAIN X REVIEWED BY: CORPS DATE: 4-18-83

	SAMPLE # :	12589 12590 12591 12592
•	UNITS :	LAND WAKE BE HELDE IKE
	LOQ . :	0. 900 111
39.	acenaphthylene	54 24 24 24
40.	anthracene	Su bu bu bu
41.	benzo(ghi)perylene	1 254 254 254
42.	fluorene	84 84 84
43.	phenanthrene	1 1 1 1
44.	dibenzo(a,h)anthracene	154 254 254 25u
45.	ideno(1,2,3-cd)pyrene	154 4 4 4
46.	pyrene	(25) 44 44 44
47.	TCDD	ND ND ND ND

ACID COLPOUNDS

PROJECT: Waking WDUE COMPILED BY: MBlycich DATE: 4-18-83
LABORATORY: FPAReyin X REVIEWED BY: DATE: 4-18-83

SAMPLE # :	12589 12590 12591 12592
. UNITS :	untly 1/Kg 1/Kg ug/Kg
L0Q :	
1. 2,4,6-trichlorophenol	84 Du Du Du
2 p-chloro-m-cresol	5u 8u 8u 8u
3. 2-chlorophenol	24 24 24
4. 2,4-dichlorophenol	124124 124
5. 2,4-dimethyl phenol	84 84 84 84
· 6: 2-nitrophenol	15 u 20 u 20 u 20 u
7. 4-nitrophenol	84 44 44 44
8. 2,4-dinitrophenol	30u 30u 30u 30u
9. 4,6-dinitro-o-cresol	. 1 1 1 1
10. pentachlorophenol	15 u 35 u 35 u 35 u
ll. phenol	54 24 24 24

BORATORY: EPA Region X REVIEWED BY: DEFINITION DATE: 6/30/83

		- 1		
SAMPLE # :	12589 12	2590 12591		
UNITS : Or	y wt 49/kg x	19/kg 19/Ka	µg/Kg	
LOQ : %.	*	7.6% 71.2%	76.8%	
aldrin	12)	87) 34	lu	
dieldrin		1u 3u	3u	
chlordane	34	2u 3u	lu	
4,4'-DDT	1020 6	3000 (47)	Iu	
4,4'-DDE	341	600 (25)	(12)	
4,4'-000	32	660) 34	7	
-endosulfan I -	280	180) 15)	(37)	
-endosulfan II	1070	1u (360)	(300)	
endosulfan sulfate	(12)	1 140	3u	
endrin	35	1 3u	3u	
endrin aldehyde	34	1 1	3u	
heptachlor	1		lu	
heptachlor epoxide	1	1 . 1	Iu	
- BHC A	(45)	1. 1	(18)	-
- BHC B	54)	¥ 1	Bu.	
- BHC G	(130)	14) (83	(94)	
- BHC D	3и	lu 34	lu	
PCB - 1242	1 1	50u 50u	10u	

* Oil - Calculated on Wt/WT basis

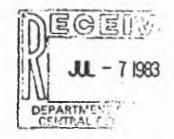
JL - 7 1983

DEPARTMENT C
CENTRAL

PESTICIBLE (centinged).

LABORATORY: FPA Region X REVIEWED BY: OFT DATE: 7/1/83

	SAMPLE #	:		12589	12590	12591	12592				1
	UNITS		Dry wt	My/kg		My/Ky					
	LOQ	•									
19.	PCB - 1254			70u	50u	50u	10u				
20.	1221 - 021		-	1	1		11			1	1
21.	PCB - 1232					1					
22.	PCB - 1248		-								
23.	PCB - 1260		-			-	1				
24.	PCB - 1016	-		1	1	V	V		•		
25.	toxaphene			210u	150u	150u	30ù	4			
26.	Diaz inen		(32800	104	340	190				
27,	MalaThion			10u	11	10u	104	*			
28,	ParaThion			3700u	.	10u	1				*
29.	Disulfotan		(3000	11	10u	1				
30	Chlorpyrifo.	s ·	- (2000	4	290	(16)				
31.											



TUBLATIVELY IDEALLS HED CORPORADS.

PROJECT: Makima MDOE COMPILED BY: MBlazerich UAIL: 4-18-83
LABORATORY: EPA REGION X REVIEWED BY: MPS. HATE: 4-8-3

ACIU/NB		1			1	 1	1	
FRACTION	SAMPLE # :	12589	12590	12591	12592		1.	-
CAS &	NAME # identity	16/	9/20	5/0	3/20		1	
147-6	o-Xylene	1500	ND	ND	ND			
6/1 214-3	1-etyl-2-methyl- benzine	52UP	1	1		ı e		
874. 341-9	1-ethyl-2, 4-dimety	11000				 		-1
1758	2- Illust - 34- direct	3300	1					
488	1, 2, 3, 9-tetremethy	1- entiret						
5. - 23-} 90	1-method	estimate						
2613	14-indene, 2,3 rles	h Int						
1 76-5	-1,1,3-trimether-	3299						
861-9	naphthalene	8300 116/8						
573 998-8	nephthalene	19000		V.				
10463	acetic acid, 2- buting	1300p	V	46	1	-		

TEMPATIVELY IDENTIFIED COMPOUNDS.

PROJECT: Makemy W DOE COMPILED BY: JM Blogned, DATE: 4-18-83
LABORATORY: EPARisin X REVIEWED BY: 9005 DATE: 4-18-83

		1					
FRACTION B	SAMPLE :	11589	12540	12591	12592		1.
CAS #	NAME						
2921 1188-2	of the property of the	1 58000 1 1 10/8	ND	320 49/K	ND		
×	chlospyrfos n	X		X	V	-	
298 · 1204-4	phosphoodething	to Mall		240	95/K		
×	Disulfation or (disyston)	1 X		X	X		
341-)	naphthalen	24000 ug/L		ND	ND.		
4920	ethor barrene	1400/2		1	1		
333 1541-5	o, u-duting o-a-nd	1- 45000		460 Kg	35P		
χ.	[Diazionon]	"X	*	X	X		
53467 1611-1	acetic and proper	one 23,000	V	86/Kg	ND		
1955-9	PPDDE	ND	6600	ND.	1		

TERTATIVELY IDENTIFIED CORPORNS

PROJECT: Makima WDVECOMPILED BY: MBlazerich UAIL: 4-18-83
LABORATORY: EPA-Region X REVIEWED BY: MB WATE: 4-18-83

FRACTION SAMPLE :	12589	12590	12591	12592				-
CAS & NAME			•		_			i,
1812-8 O, P- DDD	ND	Truce	ND	ND				
72 1954-8 Gr-DDD		stanti aver)		1	·			
789 2002-6 O,P-DDT		9,00 200 200 3,00 3,00 3,00 4,00 4,00 4,00 4,00 4,					0.0	
50 21-29-3 P.P DDT		1200					V	
1610 6-nother NN bin -(1-nihlethal) 135 22. 78-0 tringine 2, 4-diemine		900, 400, 400, Kr.				4)		
X. [Prometon(Primital)		X		•				
79 trichlowethere 2301-6		109 409						
930 2-cyclohegen_1-one		179-					- 12	
3567 Bonsonsmethand 4-chlore 35-16-6 Striploy; henry)-cc-		Tart.			*	_		
1891 Phosphyrithinic acres 1054-7 sulmol other trees	1	ND		169				

APPENDIX E

YAKIMA AGRICULTURAL RESEARCH LABORATORY VISUAL SITE INSPECTION PHOTO LOG

YARL VSI PHOTO LOG 9 SEPT 1987

ROLL #1

Photo

- 1. Pesticide storage room.
- 2. Septic tank / drainfield system, facing southeast.
- 3. Septic tank / drainfield system, facing west.
- 4. Mixed solvent and pesticide waste, 5-gal drum storage.

YARL VSI PHOTO LOG 9 SEPT 1987

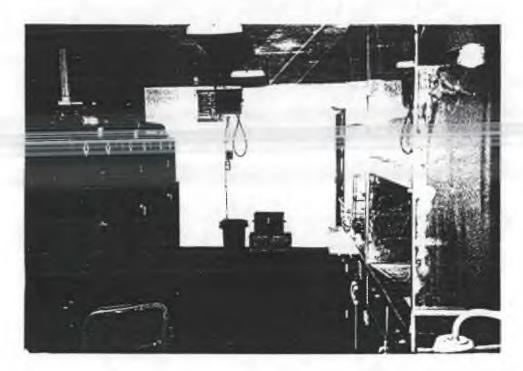


Photo 3. Pesticide storage room.

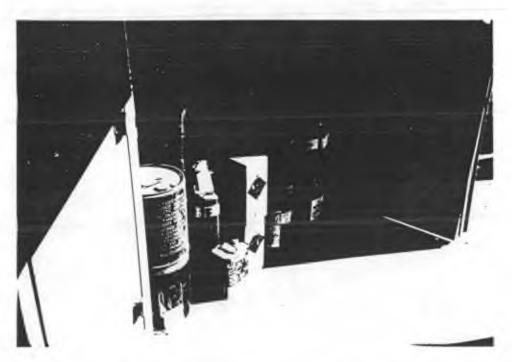


Photo 4. Mixed solvent and pesticide waste, 5-gal drum storage.

YARL VSI PHOTO LOG 9 SEPT 1987

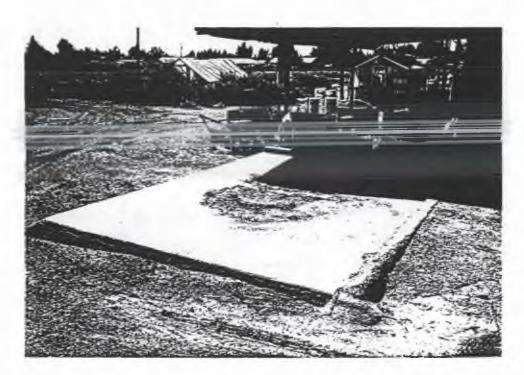


Photo 1. Septic tank / drainfield system, facing southeast.

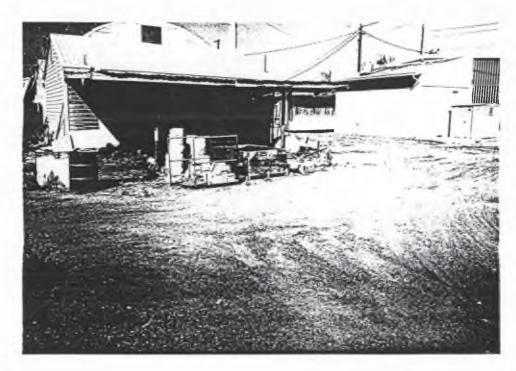


Photo 2. Septic tank / drainfield system, facing west.